## Department of Defense Fiscal Year (FY) 2018 Budget Estimates

May 2017



## **Air Force**

Justification Book Volume 1 of 1

Other Procurement, Air Force

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Air Force • Budget Estimates FY 2018 • Procurement

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# Appropriation Language Fiscal Year (FY) 2018 President's Budget Request Other Procurement, Air Force

For procurement and modification of equipment (including ground guidance and electronic control equipment, and ground electronic and communication equipment), and supplies, materials, and spare parts therefor, not otherwise provided for; the purchase of passenger motor and expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon, prior to approval of title; reserve plant and Government, contractor-owned equipment layaway, and overseas contingency operations, \$3,467,046,000 to remain available for obligation until September 30, 2020.



# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

04 May 2017

| Appropriation                        | FY 2016<br>Base + OCO | FY 2017 PB Request with CR Adj Base | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>Base |
|--------------------------------------|-----------------------|-------------------------------------|---|
| Aircraft Procurement, Air Force      | 15,948,514            | 15,722,662                          | 17,570,182  |
| Missile Procurement, Air Force       | 3,188,714             | 2,904,680                           | 2,904,680   |
| Space Procurement, Air Force         | 2,811,456             | 2,806,111                           | 2,826,011   |
| Procurement of Ammunition, Air Force | 1,973,389             | 1,741,199                           | 1,811,199   |
| Other Procurement, Air Force         | 21,818,134            | 18,275,655                          | 19,552,800  |
| Total Department of the Air Force    | 45,740,207            | 41,450,307                          | 44,664,872  |

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# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

04 May 2017

| Appropriation                        | FY 2017 PB Request with CR Adj OCO | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>OCO | FY 2017<br>Less Enacted<br>Div B<br>P.L.114-254**<br>OCO | FY 2017<br>Remaining Req<br>with CR Adj<br>OCO |
|--------------------------------------|------------------------------------|--|--|--|
| Aircraft Procurement, Air Force      | 128,900                            | 202,000  |  | 202,000  |
| Missile Procurement, Air Force       | 289,142                            | 289,142  | -83,900  | 205,242  |
| Space Procurement, Air Force         |                                    |  |  |  |
| Procurement of Ammunition, Air Force | 228,874                            | 228,874  | -201,563   | 27,311   |
| Other Procurement, Air Force         | 3,477,001                          | 3,826,798  | -137,884   | 3,688,914                                      |
| Total Department of the Air Force    | 4,123,917                          | 4,546,814  | -423,347   | 4,123,467                                      |

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# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

ational Authority 04 May 2017

| Appropriation                        | FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA | FY 2017 Total PB Requests* with CR Adj Base + OCO | FY 2017 Less Enacted Div B P.L.114-254** OCO | FY 2017 Remaining Req with CR Adj Base + OCO |
|--------------------------------------|--|---|--|--|
| Aircraft Procurement, Air Force      | 15,851,562   | 17,772,182  |  | 17,772,182                                   |
| Missile Procurement, Air Force       | 3,277,722  | 3,193,822   | -83,900                                      | 3,109,922                                    |
| Space Procurement, Air Force         | 2,806,111  | 2,826,011   |  | 2,826,011                                    |
| Procurement of Ammunition, Air Force | 2,171,636  | 2,040,073   | -201,563                                     | 1,838,510                                    |
| Other Procurement, Air Force         | 21,890,540   | 23,379,598  | -137,884                                     | 23,241,714                                   |
| Total Department of the Air Force    | 45,997,571   | 49,211,686  | -423,347                                     | 48,788,339                                   |

# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

04 May 2017

| Appropriation                        | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|--------------------------------------|-----------------|----------------|------------------|
|                                      |                 |                |                  |
| Aircraft Procurement, Air Force      | 15,430,849      | 740,778        | 16,171,627       |
| Missile Procurement, Air Force       | 2,296,182       | 395,400        | 2,691,582        |
| Space Procurement, Air Force         | 3,370,775       | 2,256          | 3,373,031        |
| Procurement of Ammunition, Air Force | 1,376,602       | 501,509        | 1,878,111        |
| Other Procurement, Air Force         | 19,603,497      | 4,008,887      | 23,612,384       |
| Total Department of the Air Force    | 42,077,905      | 5,648,830      | 47,726,735       |

# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

04 May 2017

FY 2017

Appropriation: Other Procurement, Air Force

| Budget Activity                              | FY 2016<br>Base + OCO | FY 2017<br>PB Request<br>with CR Adj<br>Base | Total<br>PB Requests*<br>with CR Adj<br>Base |
|--|-----------------------|--|--|
| 02. Vehicular Equipment                      | 226,353               | 141,151                                      | 708,287                                      |
| 03. Electronics and Telecommunications Equip | 1,381,746             | 1,285,033                                    | 1,555,733                                    |
| 04. Other Base Maintenance and Support Equip | 20,150,172            | 15,996,088                                   | 16,434,581                                   |
| 05. Spares and Repair Parts                  | 59,863                | 15,784                                       | 16,600                                       |
| 20. Undistributed                            |                       | 837 <b>,</b> 599                             | 837,599                                      |
| Total Other Procurement, Air Force           | 21,818,134            | 18,275,655                                   | 19,552,800                                   |

### Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

Total Obligational Authority 04 May 2017
(Dollars in Thousands)

Appropriation: Other Procurement, Air Force

| Budget Activity                              | FY 2017  PB Request  with CR Adj  OCO | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>OCO | FY 2017 Less Enacted Div B P.L.114-254** OCO | FY 2017 Remaining Req with CR Adj OCO |
|--|---------------------------------------|--|--|---------------------------------------|
| 02. Vehicular Equipment                      | 106,817                               | 106,817  |  | 106,817                               |
| 03. Electronics and Telecommunications Equip | 62,670                                | 138,670  |  | 138,670                               |
| 04. Other Base Maintenance and Support Equip | 3,526,794                             | 3,800,591  | -137,884                                     | 3,662,707                             |
| 05. Spares and Repair Parts                  |                                       |  |  |                                       |
| 20. Undistributed                            | -219,280                              | -219,280   |  | -219,280                              |
| Total Other Procurement, Air Force           | 3,477,001                             | 3,826,798  | -137,884                                     | 3,688,914                             |

### Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

Total Obligational Authority 04 May 2017 (Dollars in Thousands)

Appropriation: Other Procurement, Air Force

| Budget Activity                              | FY 2017<br>Total<br>PB Requests**<br>with CR Adj<br>Base+OCO+SAA | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>Base + OCO | FY 2017<br>Less Enacted<br>Div B<br>P.L.114-254**<br>OCO | FY 2017 Remaining Req with CR Adj Base + OCO |
|--|--|---|--|--|
| 02. Vehicular Equipment                      | 247,968  | 815,104   |  | 815,104                                      |
| 03. Electronics and Telecommunications Equip | 1,347,703  | 1,694,403   |  | 1,694,403                                    |
| 04. Other Base Maintenance and Support Equip | 19,660,766   | 20,235,172  | -137,884   | 20,097,288                                   |
| 05. Spares and Repair Parts                  | 15,784   | 16,600  |  | 16,600                                       |
| 20. Undistributed                            | 618,319  | 618,319   |  | 618,319                                      |
| Total Other Procurement, Air Force           | 21,890,540   | 23,379,598  | -137,884   | 23,241,714                                   |

# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

04 May 2017

Appropriation: Other Procurement, Air Force

| Budget Activity                              | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|--|-----------------|----------------|------------------|
| 02. Vehicular Equipment                      | 270,954         | 119,018        | 389,972          |
| 03. Electronics and Telecommunications Equip | 1,517,059       | 130,343        | 1,647,402        |
| 04. Other Base Maintenance and Support Equip | 17,788,809      | 3,759,526      | 21,548,335       |
| 05. Spares and Repair Parts                  | 26,675          |                | 26,675           |
| 20. Undistributed                            |                 |                |                  |
| Total Other Procurement, Air Force           | 19,603,497      | 4,008,887      | 23,612,384       |

# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

04 May 2017

Appropriation: 3080F Other Procurement, Air Force

| Line No Item Nomenclature               | Ident<br>Code | FY 2016<br>Base + OCO<br>Quantity Cost | FY 2017  PB Request  with CR Adj  Base  Quantity Cost | FY 2017 Total PB Requests* with CR Adj S Base e Quantity Cost c |
|---|---------------|--|---|---|
| Budget Activity 02: Vehicular Equipment |               |  |   |   |
| Passenger Carrying Vehicles             |               |  |   |   |
| 1 Passenger Carrying Vehicles           | А             | 9,209                                  | 14,437  | 14,437 U  |
| Cargo and Utility Vehicles              |               |  |   |   |
| 2 Medium Tactical Vehicle               | A             | 58,160                                 | 24,812  | 24,812 U  |
| 3 Cap Vehicles                          | A             | 1,700                                  | 984   | 984 U   |
| 4 Cargo and Utility Vehicles            | A             | 12,483                                 | 11,191  | 122 <b>,</b> 191 U  |
| Special Purpose Vehicles                |               |  |   |   |
| 5 Security And Tactical Vehicles        | А             | 1,684                                  | 5,361   | 40,361 U  |
| 6 Special Purpose Vehicles              | А             | 9,102                                  | 4,623   | 39,623 U  |
| Fire Fighting Equipment                 |               |  |   |   |
| 7 Fire Fighting/Crash Rescue Vehicles   | А             | 10,419                                 | 12,451  | 106,451 U   |
| Materials Handling Equipment            |               |  |   |   |
| 8 Materials Handling Vehicles           | А             | 24,160                                 | 18,114  | 116,114 U   |
| Base Maintenance Support                |               |  |   |   |
| 9 Runway Snow Remov & Cleaning Equip    | А             | 6,855                                  | 2,310   | 72,310 U  |
| 10 Base Maintenance Support Vehicles    | А             | 92 <b>,</b> 581                        | 46,868  | 171,004 U   |
| Total Vehicular Equipment               |               | 226,353                                | 141,151   | 708,287   |

### Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request

Total Obligational Authority (Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line                                    | Ident | FY 2017<br>PB Request<br>with CR Adj<br>OCO | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>OCO | FY 2017<br>Less Enacted<br>Div B<br>P.L.114-254**<br>OCO | FY 2017<br>Remaining Req<br>with CR Adj S<br>OCO e |
|---|-------|---|--|--|--|
| No Item Nomenclature                    | Code  | Quantity Cost                               | Quantity Cost  | Quantity Cost  | Quantity Cost c                                    |
| Budget Activity 02: Vehicular Equipment |       |   |  |  |  |
| Passenger Carrying Vehicles             |       |   |  |  |  |
| 1 Passenger Carrying Vehicles           | A     | 2,003                                       | 2,003  |  | 2,003 U  |
| Cargo and Utility Vehicles              |       |   |  |  |  |
| 2 Medium Tactical Vehicle               | A     | 9,066                                       | 9,066  |  | 9,066 U  |
| 3 Cap Vehicles                          | A     |   |  |  | U  |
| 4 Cargo and Utility Vehicles            | Ā     | 12,264                                      | 12,264   |  | 12,264 U   |
| Special Purpose Vehicles                |       |   |  |  |  |
| 5 Security And Tactical Vehicles        | Ā     |   |  |  | U  |
| 6 Special Purpose Vehicles              | A     | 16,789                                      | 16,789   |  | 16,789 U   |
| Fire Fighting Equipment                 |       |   |  |  |  |
| 7 Fire Fighting/Crash Rescue Vehicles   | A     | 48,590                                      | 48,590   |  | 48,590 U   |
| Materials Handling Equipment            |       |   |  |  |  |
| 8 Materials Handling Vehicles           | A     | 2,366                                       | 2,366  |  | 2,366 U  |
| Base Maintenance Support                |       |   |  |  |  |
| 9 Runway Snow Remov & Cleaning Equip    | A     | 6,468                                       | 6,468  |  | 6,468 U  |
| 10 Base Maintenance Support Vehicles    | A     | 9,271                                       | 9,271  |  | 9,271 U  |
| Total Vehicular Equipment               |       | 106,817                                     | 106,817  |  | 106,817  |

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Total Obligational Authority
(Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line                                    | Ident    | FY 2017<br>Total<br>PB Requests**<br>with CR Adj<br>Base+OCO+SAA | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>Base + OCO | FY 2017<br>Less Enacted<br>Div B<br>P.L.114-254**<br>OCO | FY 2017<br>Remaining Req<br>with CR Adj S<br>Base + OCO e |
|---|----------|--|---|--|---|
| No Item Nomenclature                    | Code<br> | Quantity Cost  | Quantity Cost   | Quantity Cost  | Quantity Cost c   |
| Budget Activity 02: Vehicular Equipment |          |  |   |  |   |
| Passenger Carrying Vehicles             |          |  |   |  |   |
| 1 Passenger Carrying Vehicles           | A        | 16,440   | 16,440  |  | 16,440 U  |
| Cargo and Utility Vehicles              |          |  |   |  |   |
| 2 Medium Tactical Vehicle               | A        | 33,878   | 33,878  |  | 33,878 U  |
| 3 Cap Vehicles                          | A        | 984  | 984   |  | 984 U   |
| 4 Cargo and Utility Vehicles            | A        | 23,455   | 134,455   |  | 134,455 U   |
| Special Purpose Vehicles                |          |  |   |  |   |
| 5 Security And Tactical Vehicles        | A        | 5,361  | 40,361  |  | 40,361 U  |
| 6 Special Purpose Vehicles              | A        | 21,412   | 56,412  |  | 56,412 U  |
| Fire Fighting Equipment                 |          |  |   |  |   |
| 7 Fire Fighting/Crash Rescue Vehicles   | A        | 61,041   | 155,041   |  | 155,041 U   |
| Materials Handling Equipment            |          |  |   |  |   |
| 8 Materials Handling Vehicles           | A        | 20,480   | 118,480   |  | 118,480 U   |
| Base Maintenance Support                |          |  |   |  |   |
| 9 Runway Snow Remov & Cleaning Equip    | A        | 8,778  | 78,778  |  | 78,778 U  |
| 10 Base Maintenance Support Vehicles    | A        | 56 <b>,</b> 139  | 180,275   |  | 180,275 U   |
| Total Vehicular Equipment               |          | 247,968  | 815,104   |  | 815,104   |

P-1C1F: FY 2018 President's Budget Request (Published Version), as of May 4, 2017 at 10:02:54

# Department of the Air Force FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

04 May 2017

Appropriation: 3080F Other Procurement, Air Force

| Line                                    | Ident | FY 2018<br>Base | FY 2018<br>OCO | FY 2018 S<br>Total e | s<br>e |  |
|---|-------|-----------------|----------------|----------------------|--------|--|
| No Item Nomenclature                    | Code  | Quantity Cost   | Quantity Cost  | Quantity Cost c      |        |  |
| Budget Activity 02: Vehicular Equipment |       |                 |                |                      |        |  |
| Passenger Carrying Vehicles             |       |                 |                |                      |        |  |
| 1 Passenger Carrying Vehicles           | A     | 15,651          | 3,855          | 19,506 U             |        |  |
| Cargo and Utility Vehicles              |       |                 |                |                      |        |  |
| 2 Medium Tactical Vehicle               | A     | 54,607          |                | 54,607 U             |        |  |
| 3 Cap Vehicles                          | A     | 1,011           |                | 1,011 U              |        |  |
| 4 Cargo and Utility Vehicles            | A     | 28,670          | 1,882          | 30,552 U             |        |  |
| Special Purpose Vehicles                |       |                 |                |                      |        |  |
| 5 Security And Tactical Vehicles        | A     | 59,398          | 1,100          | 60,498 U             |        |  |
| 6 Special Purpose Vehicles              | A     | 19,784          | 32,479         | 52,263 U             |        |  |
| Fire Fighting Equipment                 |       |                 |                |                      |        |  |
| 7 Fire Fighting/Crash Rescue Vehicles   | A     | 14,768          | 22,583         | 37,351 U             |        |  |
| Materials Handling Equipment            |       |                 |                |                      |        |  |
| 8 Materials Handling Vehicles           | A     | 13,561          | 5,353          | 18,914 U             |        |  |
| Base Maintenance Support                |       |                 |                |                      |        |  |
| 9 Runway Snow Remov & Cleaning Equip    | A     | 3,429           | 11,315         | 14,744 U             |        |  |
| 10 Base Maintenance Support Vehicles    | A     | 60,075          | 40,451         | 100,526 U            |        |  |
| Total Vehicular Equipment               |       | 270,954         | 119,018        | 389,972              |        |  |

pligational Authority 04 May 2017

Appropriation: 3080F Other Procurement, Air Force

| Line No Item Nomenclature                           | Ident<br>Code | FY 2016<br>Base + OCO<br>Quantity Cost | FY 2017 PB Request with CR Adj Base Quantity Cost | FY 2017 Total PB Requests* with CR Adj S Base e Quantity Cost c |
|---|---------------|--|---|---|
| Budget Activity 03: Electronics and Telecommunicati | ons Equip     |  |   |   |
| Comm Security Equipment(Comsec)                     |               |  |   |   |
| 11 Comsec Equipment                                 | A             | 136,998                                | 72,359  | 80,359 U  |
| 12 Modifications (COMSEC)                           | A             | 677                                    |   | Ŭ   |
| Intelligence Programs                               |               |  |   |   |
| 13 International Intel Tech & Architectures         | A             |  |   | U   |
| 14 Intelligence Training Equipment                  | A             | 4,041                                  | 6,982   | 6,982 U   |
| 15 Intelligence Comm Equipment                      | A             | 29,272                                 | 30,504  | 30,504 U  |
| Electronics Programs                                |               |  |   |   |
| 16 Air Traffic Control & Landing Sys                | A             | 28,823                                 | 55,803  | 79 <b>,</b> 203 U   |
| 17 National Airspace System                         | A             | 5,833                                  | 2,673   | 2,673 U   |
| 18 Battle Control System - Fixed                    | A             | 2,018                                  | 5,677   | 5,677 U   |
| 19 Theater Air Control Sys Improvements             | A             | 22,710                                 | 1,163   | 1,163 U   |
| 20 Weather Observation Forecast                     | A             | 21,511                                 | 21,667  | 21,667 U  |
| 21 Strategic Command And Control                    | A             | 286,980                                | 39,803  | 39,803 U  |
| 22 Cheyenne Mountain Complex                        | A             | 36,186                                 | 24,618  | 24,618 U  |
| 23 Mission Planning Systems                         | A             | 14,456                                 | 15,868  | 15,868 U  |
| 24 Drug Interdiction Spt                            | A             | 9,797                                  |   | Ū   |
| 25 Integrated Strat Plan & Analy Network (ISPAN)    | A             | 9,597                                  | 9,331   | 9,331 U   |
|   |               |  |   |   |

### Department of the Air Force FY 2018 President's Budget Request

## Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

FY 2017

FY 2017

Appropriation: 3080F Other Procurement, Air Force

| Line   | Ident | FY 20<br>PB Rec<br>with CF<br>OCC | quest<br>R Adj | Tota<br>PB Requ<br>with CF<br>OCC | al<br>ıests*<br>R Adj | Less Er<br>Div<br>P.L.114- | B<br>-254** | FY 20<br>Remainin<br>with CR<br>OCO | g Req<br>Adj    | s<br>e |
|--|-------|-----------------------------------|----------------|-----------------------------------|-----------------------|----------------------------|-------------|-------------------------------------|-----------------|--------|
| No Item Nomenclature                               | Code  | Quantity                          | Cost           | Quantity                          | Cost                  | Quantity                   | Cost        | Quantity                            | Cost            | C      |
| Budget Activity 03: Electronics and Telecommunicat |       |                                   |                |                                   |                       |                            |             |                                     |                 |        |
| Comm Security Equipment(Comsec)                    | _     |                                   |                |                                   |                       |                            |             |                                     |                 |        |
| 11 Comsec Equipment                                | А     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 12 Modifications (COMSEC)                          | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| Intelligence Programs                              |       |                                   |                |                                   |                       |                            |             |                                     |                 |        |
| 13 International Intel Tech & Architectures        | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 14 Intelligence Training Equipment                 | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 15 Intelligence Comm Equipment                     | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| Electronics Programs                               |       |                                   |                |                                   |                       |                            |             |                                     |                 |        |
| 16 Air Traffic Control & Landing Sys               | A     |                                   | 42,650         |                                   | 42,650                |                            |             |                                     | 42 <b>,</b> 650 | U      |
| 17 National Airspace System                        | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 18 Battle Control System - Fixed                   | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 19 Theater Air Control Sys Improvements            | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 20 Weather Observation Forecast                    | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 21 Strategic Command And Control                   | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 22 Cheyenne Mountain Complex                       | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 23 Mission Planning Systems                        | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 24 Drug Interdiction Spt                           | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |
| 25 Integrated Strat Plan & Analy Network (ISPAN)   | A     |                                   |                |                                   |                       |                            |             |                                     |                 | U      |

P-1C1F: FY 2018 President's Budget Request (Published Version), as of May 4, 2017 at 10:02:54

(Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line<br>No Item Nomenclature                       | Ident<br>Code  | FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost | FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost | FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost | -                 | S<br>e<br>c |
|--|----------------|--|---|--|-------------------|-------------|
| Budget Activity 03: Electronics and Telecommunicat | <br>ions Equip |  |   |  |                   | _           |
| Comm Security Equipment(Comsec)                    |                |  |   |  |                   |             |
| 11 Comsec Equipment                                | A              | 72,359   | 80,359  |  | 80,359            | U           |
| 12 Modifications (COMSEC)                          | А              |  |   |  | Ţ                 | U           |
| Intelligence Programs                              |                |  |   |  |                   |             |
| 13 International Intel Tech & Architectures        | A              |  |   |  | Ţ                 | U           |
| 14 Intelligence Training Equipment                 | А              | 6,982  | 6,982   |  | 6 <b>,</b> 982 t  | U           |
| 15 Intelligence Comm Equipment                     | A              | 30,504   | 30,504  |  | 30,504            | U           |
| Electronics Programs                               |                |  |   |  |                   |             |
| 16 Air Traffic Control & Landing Sys               | A              | 98,453   | 121,853   |  | 121,853           | U           |
| 17 National Airspace System                        | A              | 2,673  | 2,673   |  | 2,673 (           | U           |
| 18 Battle Control System - Fixed                   | A              | 5,677  | 5,677   |  | 5 <b>,</b> 677 t  | U           |
| 19 Theater Air Control Sys Improvements            | А              | 1,163  | 1,163   |  | 1,163 t           | U           |
| 20 Weather Observation Forecast                    | А              | 21,667   | 21,667  |  | 21,667            | U           |
| 21 Strategic Command And Control                   | А              | 39,803   | 39,803  |  | 39,803 (          | U           |
| 22 Cheyenne Mountain Complex                       | А              | 24,618   | 24,618  |  | 24,618 t          | U           |
| 23 Mission Planning Systems                        | А              | 15,868   | 15,868  |  | 15 <b>,</b> 868 t | U           |
| 24 Drug Interdiction Spt                           | А              |  |   |  | Ţ                 | U           |
| 25 Integrated Strat Plan & Analy Network (ISPAN)   | А              | 9,331  | 9,331   |  | 9,331 (           | U           |
|  |                |  |   |  |                   |             |

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Appropriation: 3080F Other Procurement, Air Force

| Tdent.   |                                       |   | FY 2018<br>OCO  |   | FY 2018<br>Total                       |   | S<br>e   |
|----------|---------------------------------------|---|---|---|--|---|--|
| Code     | Quantity                              | Cost  | Quantity  | Cost  | Quantity                               | Cost  | C<br>-   |
| ns Equip |                                       |   |   |   |  |   |  |
|          |                                       |   |   |   |  |   |  |
| А        | 1                                     | 15,000  |   |   | 115                                    | 5,000   | U  |
| А        |                                       |   |   |   |  |   | U  |
|          |                                       |   |   |   |  |   |  |
| A        |                                       | 22,335  |   | 8,873   | 31                                     | 1,208   | U  |
| А        |                                       | 5,892   |   |   | Ţ.                                     | 5,892   | U  |
| А        |                                       | 34,072  |   | 2,000   | 36                                     | 6 <b>,</b> 072  | U  |
|          |                                       |   |   |   |  |   |  |
| А        |                                       | 66,143  |   | 56,500  | 122                                    | 2,643   | U  |
| A        |                                       | 12,641  |   |   | 12                                     | 2,641   | U  |
| A        |                                       | 6,415   |   |   | (                                      | 6,415   | U  |
| А        |                                       | 23,233  |   | 4,970   | 28                                     | 8,203   | U  |
| А        |                                       | 40,116  |   |   | 40                                     | 0,116   | U  |
| A        |                                       | 72 <b>,</b> 810   |   |   | 72                                     | 2,810   | U  |
| А        |                                       | 9,864   |   |   | Ğ                                      | 9,864   | U  |
| А        |                                       | 15,486  |   |   | 15                                     | 5,486   | U  |
| А        |                                       |   |   |   |  |   | U  |
| А        |                                       | 9,187   |   |   | G                                      | 9,187   | U  |
|          | A A A A A A A A A A A A A A A A A A A | Ident Bas Code Quantity as Equip  A 1 A A A A A A A A A A A A A A A A A | Code Quantity Cost 115,000 A  A 115,000 A  A 22,335 A 5,892 A 34,072  A 66,143 A 12,641 A 6,415 A 23,233 A 40,116 A 72,810 A 9,864 A 15,486 A | Ident Base OCO Code Quantity Cost Quantity  A 115,000  A 22,335  A 5,892  A 34,072  A 66,143  A 12,641  A 6,415  A 23,233  A 40,116  A 72,810  A 9,864  A 15,486  A | Ident Code Quantity Cost Quantity Cost | Ident Code Code Code Quantity         Base Cost Quantity         OCO Cost Quantity         Total Quantity           Is Equip         A         115,000         11.           A         A         115,000         11.           A         A         22,335         8,873         3.           A         5,892         3.         3.           A         34,072         2,000         3.           A         66,143         56,500         12.           A         12,641         1.         1.           A         6,415         1.         1.           A         40,116         4.         4.           A         72,810         7.           A         9,864         1.           A         15,486         1. | Ident Code Quantity         Base Quantity         OCO Quantity         Total Cost Quantity         < |

04 May 2017

Appropriation: 3080F Other Procurement, Air Force

| Line   | Ident | FY 2016<br>Base + OCO | FY 2017<br>PB Request<br>with CR Adj<br>Base | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>Base | S<br>e |
|--|-------|-----------------------|--|---|--------|
| No Item Nomenclature                             | Code  | Quantity Cost         | Quantity Cost                                | Quantity Cost   |        |
| Spcl Comm-Electronics Projects                   |       |                       |  |   |        |
| 26 General Information Technology                | А     | 31,952                | 41,779                                       | 41,779  | U      |
| 27 AF Global Command & Control Sys               | А     | 7,212                 | 15,729                                       | 15,729  | U      |
| 28 Mobility Command and Control                  | А     | 13,062                | 9,814  | 9,814   | U      |
| 29 Air Force Physical Security System            | А     | 98,533                | 99,460                                       | 244,060   | U      |
| 30 Combat Training Ranges                        | А     | 28,106                | 34,850                                       | 34,850  | U      |
| 31 Minimum Essential Emergency Comm N            | А     | 5,232                 | 198,925                                      | 198,925   | U      |
| 32 Wide Area Surveillance (WAS)                  |       |                       | 6,943  | 6,943   | U      |
| 33 C3 Countermeasures                            | А     | 7,453                 | 19,580                                       | 19,580  | U      |
| 34 GCSS-AF Fos                                   | А     | 5,296                 | 1,743  | 1,743   | U      |
| 35 Defense Enterprise Accounting and Mgmt System | А     | 4,755                 |  |   | U      |
| 36 Theater Battle Mgt C2 System                  | А     | 7,473                 | 9,659  | 9,659   | U      |
| 37 Air & Space Operations Ctr-WPN SYS            | А     | 9,993                 | 15,474                                       | 15,474  | U      |
| 38 Air Operations Center (AOC) 10.2              |       | 14,846                | 30,623                                       | 30,623  | U      |
| 39 Spectrum Relocation Fund                      | А     | 19,298                |  |   | U      |
| Air Force Communications                         |       |                       |  |   |        |
| 40 Base Information Transpt Infrast (BITI) Wired | А     | 74,621                | 40,043                                       | 40,043  | U      |
| 41 AFNET   | А     | 98,143                | 146,897                                      | 146,897   | U      |
| 42 Joint Communications Support Element (JCSE)   | А     | 5,199                 | 5,182  | 5,182   | U      |
| 43 USCENTCOM                                     | А     | 25,780                | 13,418                                       | 13,418  | U      |
|  |       |                       |  |   |        |

### Department of the Air Force FY 2018 President's Budget Request

## Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line No Item Nomenclature                        | Ident<br>Code | FY 2017 PB Request with CR Adj OCO Quantity Cost | FY 2017 Total PB Requests* with CR Adj OCO Quantity Cost | FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost | FY 2017 Remaining Req with CR Adj S OCO e Quantity Cost c |
|--|---------------|--|--|--|---|
| Spcl Comm-Electronics Projects                   |               |  |  |  |   |
| 26 General Information Technology                | А             |  |  |  | U   |
| 27 AF Global Command & Control Sys               | А             |  |  |  | U   |
| 28 Mobility Command and Control                  | А             |  |  |  | U   |
| 29 Air Force Physical Security System            | А             | 7,500  | 83,500   |  | 83,500 U  |
| 30 Combat Training Ranges                        | A             |  |  |  | U   |
| 31 Minimum Essential Emergency Comm N            | А             |  |  |  | U   |
| 32 Wide Area Surveillance (WAS)                  |               |  |  |  | U   |
| 33 C3 Countermeasures                            | А             | 620  | 620  |  | 620 U   |
| 34 GCSS-AF Fos                                   | A             |  |  |  | U   |
| 35 Defense Enterprise Accounting and Mgmt System | А             |  |  |  | U   |
| 36 Theater Battle Mgt C2 System                  | A             |  |  |  | U   |
| 37 Air & Space Operations Ctr-WPN SYS            | А             |  |  |  | U   |
| 38 Air Operations Center (AOC) 10.2              |               |  |  |  | U   |
| 39 Spectrum Relocation Fund                      | A             |  |  |  | U   |
| Air Force Communications                         |               |  |  |  |   |
| 40 Base Information Transpt Infrast (BITI) Wired | А             |  |  |  | U   |
| 41 AFNET   | А             |  |  |  | U   |
| 42 Joint Communications Support Element (JCSE)   | A             |  |  |  | U   |
| 43 USCENTCOM                                     | A             |  |  |  | U   |
|  |               |  |  |  |   |

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(Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line   | Ident | FY 2017<br>Total<br>PB Requests**<br>with CR Adj<br>Base+OCO+SAA | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>Base + OCO | FY 2017<br>Less Enacted<br>Div B<br>P.L.114-254**<br>OCO | FY 2017<br>Remaining Req<br>with CR Adj S<br>Base + OCO e |
|--|-------|--|---|--|---|
| No Item Nomenclature                             | Code  | Quantity Cost  | Quantity Cost   | Quantity Cost  | Quantity Cost c   |
| Spcl Comm-Electronics Projects                   |       |  |   |  |   |
| 26 General Information Technology                | A     | 41,779   | 41,779  |  | 41,779 U  |
| 27 AF Global Command & Control Sys               | A     | 15,729   | 15,729  |  | 15,729 U  |
| 28 Mobility Command and Control                  | A     | 9,814  | 9,814   |  | 9,814 U   |
| 29 Air Force Physical Security System            | A     | 106,960  | 327,560   |  | 327,560 U   |
| 30 Combat Training Ranges                        | A     | 34,850   | 34,850  |  | 34,850 U  |
| 31 Minimum Essential Emergency Comm N            | A     | 198,925  | 198,925   |  | 198,925 U   |
| 32 Wide Area Surveillance (WAS)                  |       | 6,943  | 6,943   |  | 6,943 U   |
| 33 C3 Countermeasures                            | А     | 20,200   | 20,200  |  | 20,200 U  |
| 34 GCSS-AF Fos                                   | A     | 1,743  | 1,743   |  | 1,743 U   |
| 35 Defense Enterprise Accounting and Mgmt System | А     |  |   |  | U   |
| 36 Theater Battle Mgt C2 System                  | А     | 9,659  | 9,659   |  | 9,659 U   |
| 37 Air & Space Operations Ctr-WPN SYS            | A     | 15,474   | 15,474  |  | 15,474 U  |
| 38 Air Operations Center (AOC) 10.2              |       | 30,623   | 30,623  |  | 30,623 U  |
| 39 Spectrum Relocation Fund                      | А     |  |   |  | U   |
| Air Force Communications                         |       |  |   |  |   |
| 40 Base Information Transpt Infrast (BITI) Wired | А     | 40,043   | 40,043  |  | 40,043 U  |
| 41 AFNET   | А     | 146,897  | 146,897   |  | 146,897 U   |
| 42 Joint Communications Support Element (JCSE)   | А     | 5,182  | 5,182   |  | 5,182 U   |
| 43 USCENTCOM                                     | А     | 13,418   | 13,418  |  | 13,418 U  |
|  |       |  |   |  |   |

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(Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line   | Ident | FY 2018<br>Base |                 | FY 2018<br>OCO |       | FY 2018<br>Total |                 | S<br>e |
|--|-------|-----------------|-----------------|----------------|-------|------------------|-----------------|--------|
| No Item Nomenclature                             | Code  | Quantity        | Cost            | Quantity       | Cost  | Quantity         | Cost            |        |
| Spcl Comm-Electronics Projects                   |       |                 |                 |                |       |                  |                 |        |
| 26 General Information Technology                | A     |                 | 51,826          |                |       | 5                | 51,826          | U      |
| 27 AF Global Command & Control Sys               | A     |                 | 3,634           |                |       |                  | 3,634           | U      |
| 28 Mobility Command and Control                  | A     |                 | 10,083          |                |       | 1                | 10,083          | U      |
| 29 Air Force Physical Security System            | A     | 2               | 01,866          |                | 3,000 | 20               | 04,866          | U      |
| 30 Combat Training Ranges                        | А     | 1               | 15,198          |                |       | 11               | 15,198          | U      |
| 31 Minimum Essential Emergency Comm N            | A     |                 | 292             |                |       |                  | 292             | U      |
| 32 Wide Area Surveillance (WAS)                  |       |                 | 62 <b>,</b> 087 |                |       | (                | 62,087          | U      |
| 33 C3 Countermeasures                            | A     |                 | 37,764          |                |       | 3                | 37,764          | U      |
| 34 GCSS-AF Fos                                   | A     |                 | 2,826           |                |       |                  | 2,826           | U      |
| 35 Defense Enterprise Accounting and Mgmt System | A     |                 | 1,514           |                |       |                  | 1,514           | U      |
| 36 Theater Battle Mgt C2 System                  | A     |                 | 9,646           |                |       |                  | 9,646           | U      |
| 37 Air & Space Operations Ctr-WPN SYS            | A     |                 | 25 <b>,</b> 533 |                |       | 2                | 25 <b>,</b> 533 | U      |
| 38 Air Operations Center (AOC) 10.2              |       |                 |                 |                |       |                  |                 | U      |
| 39 Spectrum Relocation Fund                      | A     |                 |                 |                |       |                  |                 | U      |
| Air Force Communications                         |       |                 |                 |                |       |                  |                 |        |
| 40 Base Information Transpt Infrast (BITI) Wired | A     |                 | 28,159          |                |       | 2                | 28,159          | U      |
| 41 AFNET   | A     | 1               | 60,820          |                |       | 16               | 60,820          | U      |
| 42 Joint Communications Support Element (JCSE)   | A     |                 | 5,135           |                |       |                  | 5,135           | U      |
| 43 USCENTCOM                                     | A     |                 | 18,719          |                |       | 1                | 18,719          | U      |
|  |       |                 |                 |                |       |                  |                 |        |

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cal Obligational Authority 04 May 2017 (Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line<br>No Item Nomenclature                      | Ident<br>Code<br> | FY 2016<br>Base + OCO<br>Quantity Cost | FY 2017 PB Request with CR Adj Base Quantity Cost | FY 2017 Total PB Requests* with CR Adj Base Quantity Cost | S e c - |
|---|-------------------|--|---|---|---------|
| Organization and Base                             |                   |  |   |   |         |
| 44 Tactical C-E Equipment                         | A                 | 138,969                                | 109,836   | 144,036   | U       |
| 45 Combat Survivor Evader Locater                 | А                 |  |   |   | U       |
| 46 Radio Equipment                                | А                 | 8,400                                  | 16,266  | 16,266  | U       |
| 47 CCTV/Audiovisual Equipment                     | А                 | 6,144                                  | 7,449   | 7,449   | U       |
| 48 Base Comm Infrastructure                       | A                 | 83,730                                 | 109,215   | 169,715   | U       |
| Modifications                                     |                   |  |   |   |         |
| 49 Comm Elect Mods                                | A                 | 78,650                                 | 65 <b>,</b> 700                                   | 65 <b>,</b> 700   |         |
| Total Electronics and Telecommunications Equip    |                   | 1,381,746                              | 1,285,033   | 1,555,733   |         |
| Budget Activity 04: Other Base Maintenance and St | upport Equip      |  |   |   |         |
| Personal Safety & Rescue Equip                    |                   |  |   |   |         |
| 50 Night Vision Goggles                           | A                 | 5,950                                  |   |   | U       |
| 51 Items Less Than \$5 Million                    | A                 | 73,030                                 | 54,416  | 71,016  | U       |
| Depot Plant+Mtrls Handling Eq                     |                   |  |   |   |         |
| 52 Mechanized Material Handling Equip             | А                 | 7,249                                  | 7,344   | 14,688  | U       |
| Base Support Equipment                            |                   |  |   |   |         |
| 53 Base Procured Equipment                        | А                 | 13,595                                 | 6,852   | 6,852   | U       |
| 54 Engineering and EOD Equipment                  | А                 | 56,806                                 |   | 221,000   | U       |
| 55 Mobility Equipment                             | А                 | 66,986                                 | 8,146   | 43,128  | U       |

### Department of the Air Force

## FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request

Total Obligational Authority (Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line   | Ident        | FY 2017<br>PB Request<br>with CR Adj<br>OCO | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>OCO | FY 2017<br>Less Enacted<br>Div B<br>P.L.114-254**<br>OCO | FY 2017<br>Remaining Req<br>with CR Adj S<br>OCO e |
|--|--------------|---|--|--|--|
| No Item Nomenclature                             | Code<br>     | Quantity Cos                                | · · · · · · · · · · · · · · · · · · ·                  | Quantity Cost  | Quantity Cost c                                    |
| Organization and Base                            |              |   |  |  |  |
| 44 Tactical C-E Equipment                        | А            | 8,10  | 0 8,100  |  | 8,100 U  |
| 45 Combat Survivor Evader Locater                | A            |   |  |  | U  |
| 46 Radio Equipment                               | А            |   |  |  | Ŭ  |
| 47 CCTV/Audiovisual Equipment                    | A            |   |  |  | U  |
| 48 Base Comm Infrastructure                      | А            |   |  |  | U  |
| Modifications                                    |              |   |  |  |  |
| 49 Comm Elect Mods                               | А            | 3,80  |  |  | 3,800 U  |
| Total Electronics and Telecommunications Equip   |              | 62,67                                       |  |  | 138,670  |
| Budget Activity 04: Other Base Maintenance and S | upport Equip |   |  |  |  |
| Personal Safety & Rescue Equip                   |              |   |  |  |  |
| 50 Night Vision Goggles                          | А            |   |  |  | Ū  |
| 51 Items Less Than \$5 Million                   | A            |   |  |  | U  |
| Depot Plant+Mtrls Handling Eq                    | А            |   |  |  | 0  |
|  | 7            |   |  |  | **   |
| 52 Mechanized Material Handling Equip            | А            |   |  |  | U  |
| Base Support Equipment                           |              |   |  |  |  |
| 53 Base Procured Equipment                       | A            |   |  |  | U  |
| 54 Engineering and EOD Equipment                 | A            | 53,90                                       | 0 53,900   |  | 53,900 U   |
| 55 Mobility Equipment                            | А            |   |  |  | U  |

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### Department of the Air Force FY 2018 President's Budget Request

## Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line No Item Nomenclature                         | Ident<br>Code<br> | FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost | FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost | FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost | FY 2017  Remaining Req with CR Adj Base + OCO Quantity Cost | S e c - |
|---|-------------------|--|---|--|---|---------|
| Organization and Base                             |                   |  |   |  |   |         |
| 44 Tactical C-E Equipment                         | А                 | 117,936  | 152,136   |  | 152,136   | U       |
| 45 Combat Survivor Evader Locater                 | А                 |  |   |  |   | U       |
| 46 Radio Equipment                                | A                 | 16,266   | 16,266  |  | 16,266  | U       |
| 47 CCTV/Audiovisual Equipment                     | А                 | 7,449  | 7,449   |  | 7,449   | U       |
| 48 Base Comm Infrastructure                       | A                 | 109,215  |   | 169,715  | U   |         |
| Modifications                                     |                   |  |   |  |   |         |
| 49 Comm Elect Mods                                | А                 | 69 <b>,</b> 500  | 69 <b>,</b> 500   |  | 69 <b>,</b> 500   |         |
| Total Electronics and Telecommunications Equip    |                   | 1,347,703  | 1,694,403   |  | 1,694,403   |         |
| Budget Activity 04: Other Base Maintenance and St | apport Equip      |  |   |  |   |         |
| Personal Safety & Rescue Equip                    |                   |  |   |  |   |         |
| 50 Night Vision Goggles                           | А                 |  |   |  |   | U       |
| 51 Items Less Than \$5 Million                    | A                 | 54,416   | 71,016  |  | 71,016  | U       |
| Depot Plant+Mtrls Handling Eq                     |                   |  |   |  |   |         |
| 52 Mechanized Material Handling Equip             | А                 | 7,344  | 14,688  |  | 14,688  | U       |
| Base Support Equipment                            |                   |  |   |  |   |         |
| 53 Base Procured Equipment                        | А                 | 6,852  | 6,852   |  | 6,852   | U       |
| 54 Engineering and EOD Equipment                  | А                 | 53,900   | 274,900   | 274,900  |   |         |
| 55 Mobility Equipment                             | А                 | 8,146  | 43,128  |  | 43,128  | U       |

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04 May 2017

Appropriation: 3080F Other Procurement, Air Force

| Line No Item Nomenclature                          | Ident<br>Code | FY 2018<br>Base<br>Quantity Cost | FY 2018<br>OCO<br>Quantity Cost | FY 2018<br>Total<br>Quantity Cost | s<br>e<br>c |
|--|---------------|----------------------------------|---------------------------------|-----------------------------------|-------------|
| Organization and Base                              |               |                                  |                                 |                                   |             |
| 44 Tactical C-E Equipment                          | A             | 123,206                          |                                 | 123,206                           | U           |
| 45 Combat Survivor Evader Locater                  | A             | 3,004                            |                                 | 3,004                             | U           |
| 46 Radio Equipment                                 | А             | 15,736                           |                                 | 15,736                            | U           |
| 47 CCTV/Audiovisual Equipment                      | А             | 5,480                            |                                 | 5,480                             | U           |
| 48 Base Comm Infrastructure                        | A             | 130,539                          | 55,000                          | 185,539                           | U           |
| Modifications                                      |               |                                  |                                 |                                   |             |
| 49 Comm Elect Mods                                 | A             | 70,798                           |                                 | 70,798                            |             |
| Total Electronics and Telecommunications Equip     |               | 1,517,059                        | 130,343                         | 1,647,402                         |             |
| Budget Activity 04: Other Base Maintenance and Sup | port Equip    |                                  |                                 |                                   |             |
| Personal Safety & Rescue Equip                     |               |                                  |                                 |                                   |             |
| 50 Night Vision Goggles                            | А             |                                  |                                 |                                   | U           |
| 51 Items Less Than \$5 Million                     | А             | 52,964                           | 8,469                           | 61,433                            | U           |
| Depot Plant+Mtrls Handling Eq                      |               |                                  |                                 |                                   |             |
| 52 Mechanized Material Handling Equip              | A             | 10,381                           |                                 | 10,381                            | U           |
| Base Support Equipment                             |               |                                  |                                 |                                   |             |
| 53 Base Procured Equipment                         | A             | 15,038                           | 7,500                           | 22,538                            | U           |
| 54 Engineering and EOD Equipment                   | А             | 26,287                           | 80,427                          | 106,714                           | U           |
| 55 Mobility Equipment                              | А             | 8,470                            |                                 | 8,470                             | U           |

04 May 2017

Appropriation: 3080F Other Procurement, Air Force

| Line No Item Nomenclature                      | Ident<br>Code<br> | FY 2016  Base + OCO  Quantity Cost | FY 2017 PB Request with CR Adj Base Quantity Cost | FY 2017 Total PB Requests* with CR Adj S Base e Quantity Cost c |
|--|-------------------|------------------------------------|---|---|
| 56 Items Less Than \$5 Million                 | A                 | 34,707                             | 28,427  | 28,427 U  |
| Special Support Projects                       |                   |                                    |   |   |
| 58 DARP RC135                                  | А                 | 23,973                             | 25 <b>,</b> 287                                   | 25 <b>,</b> 287 U   |
| 59 DCGS-AF                                     | A                 | 177,021                            | 169,201   | 197,655 U   |
| 61 Special Update Program                      | A                 | 629,371                            | 576,710   | 577 <b>,</b> 710 U  |
| 62 Defense Space Reconnaissance Prog.          | A                 | 128,724                            |   | U   |
| 999 Classified Programs                        |                   | 18,932,760                         | 15,119,705  | 15,248,818 U  |
| Total Other Base Maintenance and Support Equip |                   | 20,150,172                         | 15,996,088  | 16,434,581  |
| Budget Activity 05: Spares and Repair Parts    |                   |                                    |   |   |
| Spares and Repair Parts                        |                   |                                    |   |   |
| 64 Spares and Repair Parts                     | A                 |                                    | 15,784  | 16,600 U  |
| 65 Spares And Repair Parts                     | A                 | 59,863<br>                         |   | Ŭ<br>   |
| Total Spares and Repair Parts                  |                   | 59,863                             | 15,784  | 16,600  |
| Budget Activity 20: Undistributed              |                   |                                    |   |   |
| Undistributed                                  |                   |                                    |   |   |
| 66 Adj to Match Continuing Resolution          | А                 |                                    | 837,599   | 837 <b>,</b> 599 U  |
| Total Undistributed                            |                   |                                    | 837 <b>,</b> 599                                  | 837 <b>,</b> 599  |
| Total Other Procurement, Air Force             |                   | 21,818,134                         | 18,275,655  | 19,552,800  |

## Department of the Air Force

## FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request

Total Obligational Authority (Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Line<br>No Item Nomenclature                   | Ident<br>Code | FY 2017 PB Request with CR Adj OCO Quantity Cost | FY 2017 Total PB Requests* with CR Adj OCO Quantity Cost | FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost | FY 2017 Remaining Req with CR Adj S OCO e Quantity Cost c |
|--|---------------|--|--|--|---|
|  |               |  |  |  |   |
| 56 Items Less Than \$5 Million                 | А             |  |  |  | Ū   |
| Special Support Projects                       |               |  |  |  |   |
| 58 DARP RC135                                  | A             |  |  |  | Ū   |
| 59 DCGS-AF                                     | А             | 800  | 800  |  | 800 U   |
| 61 Special Update Program                      | А             |  |  |  | U   |
| 62 Defense Space Reconnaissance Prog.          | А             |  |  |  | U   |
| 999 Classified Programs                        |               | 3,472,094  | 3,745,891  | -137,884<br>   | 3,608,007 U   |
| Total Other Base Maintenance and Support Equip |               | 3,526,794  | 3,800,591  | -137,884   | 3,662,707   |
| Budget Activity 05: Spares and Repair Parts    |               |  |  |  |   |
| Spares and Repair Parts                        |               |  |  |  |   |
| 64 Spares and Repair Parts                     | А             |  |  |  | U   |
| 65 Spares And Repair Parts                     | А             |  |  |  | U   |
| Total Spares and Repair Parts                  |               |  |  |  |   |
| Budget Activity 20: Undistributed              |               |  |  |  |   |
| Undistributed                                  |               |  |  |  |   |
| 66 Adj to Match Continuing Resolution          | А             | -219 <b>,</b> 280                                | -219,280<br>   |  | -219,280 U  |
| Total Undistributed                            |               | -219,280   | -219 <b>,</b> 280  |  | -219,280  |
| Total Other Procurement, Air Force             |               | 3,477,001  | 3,826,798  | -137,884   | 3,688,914   |

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Total Obligational Authority
(Dollars in Thousands)

Appropriation: 3080F Other Procurement, Air Force

| Ident    | FY 2017<br>Total<br>PB Requests**<br>with CR Adj<br>Base+OCO+SAA | FY 2017<br>Total<br>PB Requests*<br>with CR Adj<br>Base + OCO   | FY 2017<br>Less Enacted<br>Div B<br>P.L.114-254**<br>OCO   | FY 2017<br>Remaining Req<br>with CR Adj S<br>Base + OCO e  |
|----------|--|---|--|--|
| Code<br> | Quantity Cost  | Quantity Cost   | Quantity Cost  | Quantity Cost c  |
| А        | 28,427   | 28,427  |  | 28,427 U   |
|          |  |   |  |  |
| A        | 25,287   | 25,287  |  | 25,287 U   |
| A        | 170,001  | 198,455   |  | 198,455 U  |
| A        | 576,710  | 577,710   |  | 577,710 U  |
| А        |  |   |  | U  |
|          | 18,729,683   | 18,994,709  | -137,884   | 18,856,825 U   |
|          | 19,660,766   | 20,235,172  | -137,884   | 20,097,288   |
|          |  |   |  |  |
|          |  |   |  |  |
| A        | 15,784   | 16,600  |  | 16,600 U   |
| A        |  |   |  | Ū  |
|          | 15,784   | 16,600  |  | 16,600   |
|          |  |   |  |  |
|          |  |   |  |  |
| A        | 618,319  | 618,319   |  | 618,319 U  |
|          | 618,319  | 618,319   |  | 618,319  |
|          | 21,890,540   | 23,379,598  | -137,884   | 23,241,714   |
|          | Code A A A A A A   | Total PB Requests** with CR Adj Base+OCO+SAA Code Quantity Cost  A 28,427  A 25,287  A 170,001  A 576,710  A 18,729,683  19,660,766  A 15,784  A 618,319  618,319 | Total PB Requests** with CR Adj Base+OCO+SAA Code Quantity Cost Quantity Cost A  28,427  A  28,427  A  28,427  A  27,287  A  170,001  A  18,729,683  18,994,709  19,660,766  A  15,784  A  15,784  A  618,319  618,319  618,319  618,319  618,319  618,319  618,319  618,319 | Total PB Requests** PB Requests* With CR Adj With CR Adj Base+OCO+SAA Base + OCO OCO Quantity Cost Quantity Cost  A 28,427 28,427  A 25,287 25,287  A 170,001 198,455  A 576,710 577,710  A 18,729,683 18,994,709 -137,884 |

P-1C1F: FY 2018 President's Budget Request (Published Version), as of May 4, 2017 at 10:02:54

04 May 2017

Appropriation: 3080F Other Procurement, Air Force

| Line No Item Nomenclature                      | Ident<br>Code | FY 2018<br>Base<br>Quantity Cost | FY 2018<br>OCO<br>Quantity Cost | FY 2018<br>Total<br>Quantity Cost | s<br>e<br>c |
|--|---------------|----------------------------------|---------------------------------|-----------------------------------|-------------|
| 56 Items Less Than \$5 Million                 | Α             | 28 <b>,</b> 768                  | 110,405                         | 139,173                           | U           |
| Special Support Projects                       |               |                                  |                                 |                                   |             |
| 58 DARP RC135                                  | А             | 25,985                           | 700                             | 26,685                            | U           |
| 59 DCGS-AF                                     | А             | 178,423                          | 9,200                           | 187,623                           | U           |
| 61 Special Update Program                      | A             | 840,980                          |                                 | 840,980                           | U           |
| 62 Defense Space Reconnaissance Prog.          | A             |                                  |                                 |                                   | U           |
| 999 Classified Programs                        |               | 16,601,513                       | 3,542,825                       | 20,144,338                        | U           |
| Total Other Base Maintenance and Support Equip |               | 17,788,809                       | 3,759,526                       | 21,548,335                        | -           |
| Budget Activity 05: Spares and Repair Parts    |               |                                  |                                 |                                   |             |
| Spares and Repair Parts                        |               |                                  |                                 |                                   |             |
| 64 Spares and Repair Parts                     | А             | 26,675                           |                                 | 26,675                            | U           |
| 65 Spares And Repair Parts                     | А             |                                  |                                 |                                   | U           |
| Total Spares and Repair Parts                  |               | 26 <b>,</b> 675                  |                                 | 26 <b>,</b> 675                   | -           |
| Budget Activity 20: Undistributed              |               |                                  |                                 |                                   |             |
| Undistributed                                  |               |                                  |                                 |                                   |             |
| 66 Adj to Match Continuing Resolution          | A             |                                  |                                 |                                   | U           |
| Total Undistributed                            |               |                                  |                                 |                                   |             |
| Total Other Procurement, Air Force             |               | 19,603,497                       | 4,008,887                       | 23,612,384                        | -           |

## Air Force • Budget Estimates FY 2018 • Procurement

## **Line Item Table of Contents (by Appropriation then Line Number)**

## Appropriation 3080F: Other Procurement, Air Force

| Line # | ВА | BSA | Line Item Number | Line Item Title                           | Page    |
|--------|----|-----|------------------|---|---------|
| 1      | 02 | 01  | 821800           | Passenger Carrying VehiclesVolume         | e 1 - 1 |
| 2      | 02 | 02  | 822230           | Medium Tactical VehicleVolume             | e 1 - 3 |
| 3      | 02 | 02  | 822910           | Cap VehiclesVolume                        | 1 - 11  |
| 4      | 02 | 02  | 822990           | Cargo and Utility Vehicles                | 1 - 13  |
| 5      | 02 | 03  | 823230           | Security And Tactical Vehicles            | 1 - 25  |
| 6      | 02 | 03  | 823990           | Special Purpose VehiclesVolume            | 1 - 31  |
| 7      | 02 | 04  | 824010           | FIRE FIGHTING/CRASH RESCUE VEHICLESVolume | 1 - 39  |
| 8      | 02 | 05  | 825990           | Materials Handling VehiclesVolume         | 1 - 45  |
| 9      | 02 | 06  | 826210           | Runway Snow Remov & Cleaning EquipVolume  | 1 - 47  |
| 10     | 02 | 06  | 826990           | Base Maintenance Support VehiclesVolume   | 1 - 49  |

## Air Force • Budget Estimates FY 2018 • Procurement

## Appropriation 3080F: Other Procurement, Air Force

| Line # | ВА | BSA | Line Item Number | Line Item Title                               | Page           |
|--------|----|-----|------------------|---|----------------|
|        |    |     |                  |   | <del>-</del> _ |
| 11     | 03 | 01  | 831010           | Comsec Equipment                              |                |
| 12     | 03 | 01  | 831970           | Modifications (COMSEC)                        | Volume 1 - 79  |
| 13     | 03 | 02  | 832050           | International Intel Tech & Architectures      |                |
| 14     | 03 | 02  | 832060           | Intelligence Training Equipment               | Volume 1 - 87  |
| 15     | 03 | 02  | 832070           | Intelligence Comm Equipment                   | Volume 1 - 89  |
| 16     | 03 | 03  | 833010           | Air Traffic Control & Landing Sys             | Volume 1 - 103 |
| 17     | 03 | 03  | 833020           | National Airspace System                      | Volume 1 - 121 |
| 18     | 03 | 03  | 833030           | Battle Control System - Fixed                 | Volume 1 - 131 |
| 19     | 03 | 03  | 833040           | Theater Air Control Sys Improvements          | Volume 1 - 133 |
| 20     | 03 | 03  | 833070           | Weather Observation Forecast                  | Volume 1 - 141 |
| 21     | 03 | 03  | 833140           | Strategic Command And Control                 | Volume 1 - 151 |
| 22     | 03 | 03  | 833160           | Cheyenne Mountain Complex                     | Volume 1 - 163 |
| 23     | 03 | 03  | 833170           | Mission Planning Systems                      | Volume 1 - 165 |
| 24     | 03 | 03  | 833440           | Drug Interdiction Spt                         | Volume 1 - 169 |
| 25     | 03 | 03  | 833560           | Integrated Strat Plan & Analy Network (ISPAN) | Volume 1 - 171 |
| 26     | 03 | 04  | 834010           | General Information Technology                | Volume 1 - 173 |

## Air Force • Budget Estimates FY 2018 • Procurement

## Appropriation 3080F: Other Procurement, Air Force

| Line # | ВА | BSA | Line Item Number | Line Item Title                                | Page           |
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| 27     | 03 | 04  | 834040           | AF Global Command & Control Sys                | /olume 1 - 209 |
| 28     | 03 | 04  | 834070           | Mobility Command and Control                   | /olume 1 - 211 |
| 29     | 03 | 04  | 834130           | Air Force Physical Security System             | /olume 1 - 213 |
| 30     | 03 | 04  | 834190           | Combat Training RangesV                        | /olume 1 - 235 |
| 31     | 03 | 04  | 834210           | Minimum Essential Emergency Comm N             | /olume 1 - 245 |
| 32     | 03 | 04  | 834240           | Wide Area Surveillance (WAS)                   | /olume 1 - 247 |
| 33     | 03 | 04  | 834320           | C3 Countermeasures                             | /olume 1 - 251 |
| 34     | 03 | 04  | 834430           | GCSS-AF FosV                                   | /olume 1 - 261 |
| 35     | 03 | 04  | 834470           | Defense Enterprise Accounting and Mgmt System\ | /olume 1 - 263 |
| 36     | 03 | 04  | 834520           | Theater Battle Mgt C2 SystemV                  | /olume 1 - 267 |
| 37     | 03 | 04  | 834530           | Air & Space Operations Ctr-WPN SYS             | /olume 1 - 269 |
| 38     | 03 | 04  | 834560           | Air Operations Center (AOC) 10.2               | /olume 1 - 275 |
| 39     | 03 | 04  | 834880           | Spectrum Relocation Fund                       | /olume 1 - 279 |
| 40     | 03 | 05  | 835060           | Base Information Transpt Infrast (BITI) Wired  | /olume 1 - 281 |
| 41     | 03 | 05  | 835080           | AFNETV   | /olume 1 - 291 |
| 42     | 03 | 05  | 835110           | Joint Communications Support Element (JCSE)\   | /olume 1 - 305 |
| 43     | 03 | 05  | 835140           | USCENTCOMV                                     | /olume 1 - 307 |
| 44     | 03 | 07  | 837100           | Tactical C-E EquipmentV                        | /olume 1 - 309 |

## Air Force • Budget Estimates FY 2018 • Procurement

#### Appropriation 3080F: Other Procurement, Air Force

| Line # | ВА | BSA | Line Item Number | Line Item Title Page                         |
|--------|----|-----|------------------|--|
| 45     | 03 | 07  | 837170           | Combat Survivor Evader LocaterVolume 1 - 335 |
| 46     | 03 | 07  | 837190           | Radio EquipmentVolume 1 - 337                |
| 47     | 03 | 07  | 837240           | CCTV/Audiovisual EquipmentVolume 1 - 339     |
| 48     | 03 | 07  | 837300           | Base Comm Infrastructure                     |
| 49     | 03 | 80  | 838010           | Comm Elect Mods                              |

## Appropriation 3080F: Other Procurement, Air Force

| Line # | ВА | BSA | Line Item Number | Line Item Title Page                             |
|--------|----|-----|------------------|--|
| 50     | 04 | 02  | 842140           | Night Vision Goggles                             |
| 51     | 04 | 02  | 842990           | Items Less Than \$5 MillionVolume 1 - 387        |
| 52     | 04 | 03  | 843050           | Mechanized Material Handling EquipVolume 1 - 397 |
| 53     | 04 | 05  | 845010           | Base Procured Equipment                          |
| 54     | 04 | 05  | 845100           | ENGINEERING AND EOD EQUIPMENTVolume 1 - 403      |
| 55     | 04 | 05  | 845420           | Mobility EquipmentVolume 1 - 407                 |
| 56     | 04 | 05  | 845990           | Items Less Than \$5 MillionVolume 1 - 409        |
| 58     | 04 | 06  | 846070           | DARP RC135                                       |

## Air Force • Budget Estimates FY 2018 • Procurement

#### Appropriation 3080F: Other Procurement, Air Force

| Line # | ВА | BSA | Line Item Number | Line Item Title Page                 |
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| 59     | 04 | 06  | 846080           | DCGS-AFVolume 1 - 419                |
| 61     | 04 | 06  | 846510           | Special Update ProgramVolume 1 - 437 |
| 62     | 04 | 06  | 846570           | Defense Space Reconnaissance Prog    |

#### Appropriation 3080F: Other Procurement, Air Force

| Line # | ВА | BSA | Line Item Number | Line Item Title              | Page       |
|--------|----|-----|------------------|------------------------------|------------|
| 64-65  | 05 | 01  | 861900           | Spares and Repair PartsVolur | me 1 - 441 |

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## Air Force • Budget Estimates FY 2018 • Procurement

## Line Item Table of Contents (Alphabetically by Line Item Title)

| Line Item Title                               | Line Item Number | Line # | ВА | BSA Page          |
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| AF Global Command & Control Sys               | 834040           | 27     | 03 | 04Volume 1 - 209  |
| AFNET   | 835080           | 41     | 03 | 05 Volume 1 - 291 |
| Air & Space Operations Ctr-WPN SYS            | 834530           | 37     | 03 | 04Volume 1 - 269  |
| Air Force Physical Security System            | 834130           | 29     | 03 | 04 Volume 1 - 213 |
| Air Operations Center (AOC) 10.2              | 834560           | 38     | 03 | 04Volume 1 - 275  |
| Air Traffic Control & Landing Sys             | 833010           | 16     | 03 | 03 Volume 1 - 103 |
| Base Comm Infrastructure                      | 837300           | 48     | 03 | 07 Volume 1 - 341 |
| Base Information Transpt Infrast (BITI) Wired | 835060           | 40     | 03 | 05 Volume 1 - 281 |
| Base Maintenance Support Vehicles             | 826990           | 10     | 02 | 06Volume 1 - 49   |
| Base Procured Equipment                       | 845010           | 53     | 04 | 05Volume 1 - 399  |
| Battle Control System - Fixed                 | 833030           | 18     | 03 | 03 Volume 1 - 131 |
| C3 Countermeasures                            | 834320           | 33     | 03 | 04Volume 1 - 251  |
| CCTV/Audiovisual Equipment                    | 837240           | 47     | 03 | 07 Volume 1 - 339 |
| Cap Vehicles                                  | 822910           | 3      | 02 | 02Volume 1 - 11   |
| Cargo and Utility Vehicles                    | 822990           | 4      | 02 | 02Volume 1 - 13   |
| Cheyenne Mountain Complex                     | 833160           | 22     | 03 | 03 Volume 1 - 163 |
| Combat Survivor Evader Locater                | 837170           | 45     | 03 | 07 Volume 1 - 335 |

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| Line Item Title                               | Line Item Number | Line # | ВА | BSA Page          |
|---|------------------|--------|----|-------------------|
| Combat Training Ranges                        | 834190           | 30     | 03 | 04Volume 1 - 235  |
| Comm Elect Mods                               | 838010           | 49     | 03 | 08 Volume 1 - 365 |
| Comsec Equipment                              | 831010           | 11     | 03 | 01Volume 1 - 63   |
| DARP RC135                                    | 846070           | 58     | 04 | 06 Volume 1 - 413 |
| DCGS-AF                                       | 846080           | 59     | 04 | 06 Volume 1 - 419 |
| Defense Enterprise Accounting and Mgmt System | 834470           | 35     | 03 | 04 Volume 1 - 263 |
| Defense Space Reconnaissance Prog.            | 846570           | 62     | 04 | 06Volume 1 - 439  |
| Drug Interdiction Spt                         | 833440           | 24     | 03 | 03 Volume 1 - 169 |
| ENGINEERING AND EOD EQUIPMENT                 | 845100           | 54     | 04 | 05 Volume 1 - 403 |
| FIRE FIGHTING/CRASH RESCUE VEHICLES           | 824010           | 7      | 02 | 04Volume 1 - 39   |
| GCSS-AF Fos                                   | 834430           | 34     | 03 | 04 Volume 1 - 261 |
| General Information Technology                | 834010           | 26     | 03 | 04 Volume 1 - 173 |
| Integrated Strat Plan & Analy Network (ISPAN) | 833560           | 25     | 03 | 03 Volume 1 - 171 |
| Intelligence Comm Equipment                   | 832070           | 15     | 03 | 02Volume 1 - 89   |
| Intelligence Training Equipment               | 832060           | 14     | 03 | 02Volume 1 - 87   |
| International Intel Tech & Architectures      | 832050           | 13     | 03 | 02Volume 1 - 81   |
| Items Less Than \$5 Million                   | 842990           | 51     | 04 | 02 Volume 1 - 387 |
| Items Less Than \$5 Million                   | 845990           | 56     | 04 | 05 Volume 1 - 409 |
| Joint Communications Support Element (JCSE)   | 835110           | 42     | 03 | 05 Volume 1 - 305 |
| Materials Handling Vehicles                   | 825990           | 8      | 02 | 05 Volume 1 - 45  |

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| Line Item Title                      | Line Item Number | Line # | ВА | BSA Page          |
|--------------------------------------|------------------|--------|----|-------------------|
| Mechanized Material Handling Equip   | 843050           | 52     | 04 | 03Volume 1 - 397  |
| Medium Tactical Vehicle              | 822230           | 2      | 02 | 02Volume 1 - 3    |
| Minimum Essential Emergency Comm N   | 834210           | 31     | 03 | 04 Volume 1 - 245 |
| Mission Planning Systems             | 833170           | 23     | 03 | 03 Volume 1 - 165 |
| Mobility Command and Control         | 834070           | 28     | 03 | 04Volume 1 - 211  |
| Mobility Equipment                   | 845420           | 55     | 04 | 05 Volume 1 - 407 |
| Modifications (COMSEC)               | 831970           | 12     | 03 | 01Volume 1 - 79   |
| National Airspace System             | 833020           | 17     | 03 | 03 Volume 1 - 121 |
| Night Vision Goggles                 | 842140           | 50     | 04 | 02 Volume 1 - 385 |
| Passenger Carrying Vehicles          | 821800           | 1      | 02 | 01Volume 1 - 1    |
| Radio Equipment                      | 837190           | 46     | 03 | 07 Volume 1 - 337 |
| Runway Snow Remov & Cleaning Equip   | 826210           | 9      | 02 | 06Volume 1 - 47   |
| Security And Tactical Vehicles       | 823230           | 5      | 02 | 03 Volume 1 - 25  |
| Spares and Repair Parts              | 861900           | 64-65  | 05 | 01Volume 1 - 441  |
| Special Purpose Vehicles             | 823990           | 6      | 02 | 03Volume 1 - 31   |
| Special Update Program               | 846510           | 61     | 04 | 06 Volume 1 - 437 |
| Spectrum Relocation Fund             | 834880           | 39     | 03 | 04 Volume 1 - 279 |
| Strategic Command And Control        | 833140           | 21     | 03 | 03 Volume 1 - 151 |
| Tactical C-E Equipment               | 837100           | 44     | 03 | 07 Volume 1 - 309 |
| Theater Air Control Sys Improvements | 833040           | 19     | 03 | 03 Volume 1 - 133 |

## Air Force • Budget Estimates FY 2018 • Procurement

| Line Item Title      |            | Line Item Number | Line # | ВА | BSA Pa         | age |
|----------------------|------------|------------------|--------|----|----------------|-----|
| Theater Battle Mgt C | 2 System   | 834520           | 36     | 03 | 04Volume 1 - 2 | 267 |
| USCENTCOM            |            | 835140           | 43     | 03 | 05Volume 1 - 3 | 307 |
| Weather Observation  | n Forecast | 833070           | 20     | 03 | 03Volume 1 - 1 | 141 |
| Wide Area Surveillar | nce (WAS)  | 834240           | 32     | 03 | 04Volume 1 - 2 | 247 |

Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1, Procurement Program (Listing by Appropriation, then Line Number)

Appropriation 3080F: Other Procurement, Air Force

BA 02: Vehicular Equipment / BSA 1: Passenger Carrying Vehicles

#### **Cost (\$ in Millions)**

|            |            |                       |                                |          |        |          |        |          | ,      |          |        |          |        |
|------------|------------|-----------------------|--------------------------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|
|            |            |                       | FY 2                           | 2016     | FY 2   | 2017     | FY 201 | 8 Base   | FY 201 | 8 OCO    | FY 201 | 8 Total  |        |
| Line#      | Cos<br>Typ |                       | Line Item Title                | Quantity | Amount |
| 1          | А          | 821800                | Passenger Carrying<br>Vehicles | -        | 9.209  | -        | 16.440 | -        | 15.651 | -        | 3.855  | -        | 19.506 |
| Total: Veh | icular I   | Equipment / Passenger | Carrying Vehicles              | -        | 9.209  | -        | 16.440 | -        | 15.651 | -        | 3.855  | -        | 19.506 |

Appropriation 3080F: Other Procurement, Air Force

BA 02: Vehicular Equipment / BSA 2: Cargo and Utility Vehicles

#### **Cost (\$ in Millions)**

|            |              |                       |                            | FY 2     | 2016   | FY 2     | 2017    | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
|------------|--------------|-----------------------|----------------------------|----------|--------|----------|---------|----------|--------|----------|--------|----------|---------|
| Line#      | Cost<br>Type |                       | Line Item Title            | Quantity | Amount | Quantity | Amount  | Quantity | Amount | Quantity | Amount | Quantity | Amount  |
| 2          | А            | 822230                | Medium Tactical Vehicle    | -        | 58.160 | -        | 33.878  | -        | 54.607 | -        | 0.000  | -        | 54.607  |
| 3          | Α            | 822910                | Cap Vehicles               | -        | 1.700  | -        | 0.984   | -        | 1.011  | -        | 0.000  | -        | 1.011   |
| 4          | Α            | 822990                | Cargo and Utility Vehicles | -        | 12.483 | -        | 134.455 | -        | 28.670 | -        | 1.882  | -        | 30.552  |
| Total: Veh | icular E     | Equipment / Cargo and | d Utility Vehicles         | -        | 72.343 | -        | 169.317 | -        | 84.288 | -        | 1.882  | -        | 86.170  |

Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1, Procurement Program (Listing by Appropriation, then Line Number)

Appropriation 3080F: Other Procurement, Air Force

BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles

#### **Cost (\$ in Millions)**

|              |             |                          |                                   | FY 2     | 2016   | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
|--------------|-------------|--------------------------|-----------------------------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
| Line#        | Cos<br>Type |                          | Line Item Title                   | Quantity | Amount  |
| 5            | А           | 823230                   | Security And Tactical<br>Vehicles | -        | 1.684  | -        | 40.361 | -        | 59.398 | -        | 1.100  | -        | 60.498  |
| 6            | Α           | 823990                   | Special Purpose Vehicles          | -        | 9.102  | -        | 56.412 | -        | 19.784 | -        | 32.479 | -        | 52.263  |
| Total: Vehic | cular E     | Equipment / Special Purp | ose Vehicles                      | -        | 10.786 | -        | 96.773 | -        | 79.182 | -        | 33.579 | -        | 112.761 |

Appropriation 3080F: Other Procurement, Air Force

BA 02: Vehicular Equipment / BSA 4: Fire Fighting Equipment

#### Cost (\$ in Millions)

|       |             |        |  |          |        |          |         | σοσε (ψ ιι | 1 14111110110) |          |        |          |         |
|-------|-------------|--------|--|----------|--------|----------|---------|------------|----------------|----------|--------|----------|---------|
|       |             |        |  | FY 2     | 2016   | FY 2     | 2017    | FY 201     | 8 Base         | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line# | Cos<br>Type |        | Line Item Title                        | Quantity | Amount | Quantity | Amount  | Quantity   | Amount         | Quantity | Amount | Quantity | Amount  |
| 7     | А           | 824010 | FIRE FIGHTING/CRASH<br>RESCUE VEHICLES | -        | 10.419 | -        | 155.041 | -          | 14.768         | -        | 22.583 | -        | 37.351  |

Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1, Procurement Program (Listing by Appropriation, then Line Number)

Appropriation 3080F: Other Procurement, Air Force

BA 02: Vehicular Equipment / BSA 4: Fire Fighting Equipment

#### Cost (\$ in Millions)

|            |              |                       |                 | FY 2     | 2016   | FY 2     | 2017    | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
|------------|--------------|-----------------------|-----------------|----------|--------|----------|---------|----------|--------|----------|--------|----------|---------|
| Line#      | Cost<br>Type | Line Item #           | Line Item Title | Quantity | Amount | Quantity | Amount  | Quantity | Amount | Quantity | Amount | Quantity | Amount  |
| Total: Veh | icular Equi  | pment / Fire Fighting | Equipment       | -        | 10.419 | -        | 155.041 | -        | 14.768 | -        | 22.583 | -        | 37.351  |

Appropriation 3080F: Other Procurement, Air Force

BA 02: Vehicular Equipment / BSA 5: Materials Handling Equipment

## Cost (\$ in Millions)

|                  |              |                         |                                |          |        |          |         | ٠.       |        |          |        |          |         |
|------------------|--------------|-------------------------|--------------------------------|----------|--------|----------|---------|----------|--------|----------|--------|----------|---------|
|                  |              |                         |                                | FY 2     | 2016   | FY 2     | 2017    | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line#            | Cost<br>Type |                         | Line Item Title                | Quantity | Amount | Quantity | Amount  | Quantity | Amount | Quantity | Amount | Quantity | Amount  |
| 8                | А            | 825990                  | Materials Handling<br>Vehicles | -        | 24.160 | -        | 118.480 | -        | 13.561 | -        | 5.353  | -        | 18.914  |
| <b>otal:</b> Veh | icular E     | Equipment / Materials I | Handling Equipment             | -        | 24.160 | -        | 118.480 | -        | 13.561 | -        | 5.353  | -        | 18.914  |

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Appropriation 3080F: Other Procurement, Air Force

BA 02: Vehicular Equipment / BSA 6: Base Maintenance Support

#### **Cost (\$ in Millions)**

|            |              |                         |                                      | FY 2     | 2016   | FY 2     | 2017    | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
|------------|--------------|-------------------------|--------------------------------------|----------|--------|----------|---------|----------|--------|----------|--------|----------|---------|
| Line#      | Cost<br>Type |                         | Line Item Title                      | Quantity | Amount | Quantity | Amount  | Quantity | Amount | Quantity | Amount | Quantity | Amount  |
| 9          | А            | 826210                  | Runway Snow Remov & Cleaning Equip   | -        | 6.855  | -        | 78.778  | -        | 3.429  | -        | 11.315 | -        | 14.744  |
| 10         | А            | 826990                  | Base Maintenance<br>Support Vehicles | -        | 92.581 | -        | 180.275 | -        | 60.075 | -        | 40.451 | -        | 100.526 |
| Total: Veh | icular E     | Equipment / Base Mainte | enance Support                       | -        | 99.436 | -        | 259.053 | -        | 63.504 | -        | 51.766 | -        | 115.270 |

Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)

#### Cost (\$ in Millions)

|       |              |        |                        | FY 2     | 2016    | FY 2     | 2017   | FY 201   | 8 Base  | FY 201   | 8 OCO  | FY 201   | 8 Total |
|-------|--------------|--------|------------------------|----------|---------|----------|--------|----------|---------|----------|--------|----------|---------|
| Line# | Cost<br>Type |        | Line Item Title        | Quantity | Amount  | Quantity | Amount | Quantity | Amount  | Quantity | Amount | Quantity | Amount  |
| 11    | А            | 831010 | Comsec Equipment       | -        | 136.998 | -        | 80.359 | -        | 115.000 | -        | 0.000  | -        | 115.000 |
| 12    | Α            | 831970 | Modifications (COMSEC) | -        | 0.677   | -        | 0.000  | -        | 0.000   | -        | 0.000  | -        | 0.000   |

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Exhibit P-1, Procurement Program
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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)

#### **Cost (\$ in Millions)**

|                 |              |                     |                          |          |         |          |        | ( 1      | ,       |          |        |          |         |
|-----------------|--------------|---------------------|--------------------------|----------|---------|----------|--------|----------|---------|----------|--------|----------|---------|
|                 |              |                     |                          | FY 2     | 2016    | FY 2     | 2017   | FY 201   | 8 Base  | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line#           | Cost<br>Type | Line Item #         | Line Item Title          | Quantity | Amount  | Quantity | Amount | Quantity | Amount  | Quantity | Amount | Quantity | Amount  |
| Total: Election |              | d Telecommunication | ns Equip / Comm Security | -        | 137.675 | -        | 80.359 | -        | 115.000 | -        | 0.000  | -        | 115.000 |

Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 2: Intelligence Programs

#### **Cost (\$ in Millions)**

|       |              |        |  |          |        |          |        |          | ,      |          |        |          |         |
|-------|--------------|--------|--|----------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
|       |              |        |  | FY 2     | 2016   | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line# | Cost<br>Type |        | Line Item Title                          | Quantity | Amount  |
| 13    | А            | 832050 | International Intel Tech & Architectures | -        | 0.000  | -        | 0.000  | -        | 22.335 | -        | 8.873  | -        | 31.208  |
| 14    | А            | 832060 | Intelligence Training<br>Equipment       | -        | 4.041  | -        | 6.982  | -        | 5.892  | -        | 0.000  | -        | 5.892   |
| 15    | А            | 832070 | Intelligence Comm<br>Equipment           | -        | 29.272 | -        | 30.504 | -        | 34.072 | -        | 2.000  | -        | 36.072  |

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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 2: Intelligence Programs

#### **Cost (\$ in Millions)**

|                            |              |                     |                         |          |        |          |        |          | ,      |          |        |          |         |
|----------------------------|--------------|---------------------|-------------------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
|                            |              |                     |                         | FY 2     | 2016   | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line#                      | Cost<br>Type | Line Item #         | Line Item Title         | Quantity | Amount  |
| Total: Electronic Programs | ctronics an  | d Telecommunicatior | ns Equip / Intelligence | -        | 33.313 | -        | 37.486 | -        | 62.299 | -        | 10.873 | -        | 73.172  |

Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs

#### Cost (\$ in Millions)

|       |              |        |                                      |          |        |          |         | •        | •      |          |        |          |         |
|-------|--------------|--------|--------------------------------------|----------|--------|----------|---------|----------|--------|----------|--------|----------|---------|
|       |              |        |                                      | FY 2     | 2016   | FY 2     | 2017    | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line# | Cost<br>Type |        | Line Item Title                      | Quantity | Amount | Quantity | Amount  | Quantity | Amount | Quantity | Amount | Quantity | Amount  |
| 16    | А            | 833010 | Air Traffic Control & Landing Sys    | -        | 28.823 | -        | 121.853 | -        | 66.143 | -        | 56.500 | -        | 122.643 |
| 17    | Α            | 833020 | National Airspace System             | -        | 5.833  | -        | 2.673   | -        | 12.641 | -        | 0.000  | -        | 12.641  |
| 18    | А            | 833030 | Battle Control System - Fixed        | -        | 2.018  | -        | 5.677   | -        | 6.415  | -        | 0.000  | -        | 6.415   |
| 19    | А            | 833040 | Theater Air Control Sys Improvements | -        | 22.710 | -        | 1.163   | -        | 23.233 | -        | 4.970  | -        | 28.203  |

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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs

#### **Cost (\$ in Millions)**

|                          |              |                       |  | FY 2     | 2016    | FY       | 2017    | FY 201   | 8 Base  | FY 201   | 8 OCO  | FY 201   | 8 Total |
|--------------------------|--------------|-----------------------|--|----------|---------|----------|---------|----------|---------|----------|--------|----------|---------|
| Line#                    | Cost<br>Type |                       | Line Item Title                                  | Quantity | Amount  | Quantity | Amount  | Quantity | Amount  | Quantity | Amount | Quantity | Amount  |
| 20                       | А            | 833070                | Weather Observation Forecast                     | -        | 21.511  | -        | 21.667  | -        | 40.116  | -        | 0.000  | -        | 40.116  |
| 21                       | А            | 833140                | Strategic Command And Control                    | -        | 286.980 | -        | 39.803  | -        | 72.810  | -        | 0.000  | -        | 72.810  |
| 22                       | А            | 833160                | Cheyenne Mountain<br>Complex                     | -        | 36.186  | -        | 24.618  | -        | 9.864   | -        | 0.000  | -        | 9.864   |
| 23                       | А            | 833170                | Mission Planning<br>Systems                      | -        | 14.456  | -        | 15.868  | -        | 15.486  | -        | 0.000  | -        | 15.486  |
| 24                       | Α            | 833440                | Drug Interdiction Spt                            | -        | 9.797   | -        | 0.000   | -        | 0.000   | -        | 0.000  | -        | 0.000   |
| 25                       | А            | 833560                | Integrated Strat Plan &<br>Analy Network (ISPAN) | -        | 9.597   | -        | 9.331   | -        | 9.187   | -        | 0.000  | -        | 9.187   |
| Total: Electory Programs | ctronics     | and Telecommunication | ns Equip / Electronics                           | -        | 437.911 | -        | 242.653 | -        | 255.895 | -        | 61.470 | -        | 317.365 |

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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 4: Spcl Comm-Electronics Projects

#### **Cost (\$ in Millions)**

|       |              |        |   | FY 2     | 2016   | FY 2     | 2017    | FY 201   | 8 Base  | FY 201   | 18 OCO | FY 201   | 8 Total |
|-------|--------------|--------|---|----------|--------|----------|---------|----------|---------|----------|--------|----------|---------|
| Line# | Cost<br>Type |        | Line Item Title                                     | Quantity | Amount | Quantity | Amount  | Quantity | Amount  | Quantity | Amount | Quantity | Amount  |
| 26    | А            | 834010 | General Information<br>Technology                   | -        | 31.952 | -        | 41.779  | -        | 51.826  | -        | 0.000  | -        | 51.826  |
| 27    | А            | 834040 | AF Global Command & Control Sys                     | -        | 7.212  | -        | 15.729  | -        | 3.634   | -        | 0.000  | -        | 3.634   |
| 28    | А            | 834070 | Mobility Command and Control                        | -        | 13.062 | -        | 9.814   | -        | 10.083  | -        | 0.000  | -        | 10.083  |
| 29    | А            | 834130 | Air Force Physical<br>Security System               | -        | 98.533 | -        | 327.560 | -        | 201.866 | -        | 3.000  | -        | 204.866 |
| 30    | Α            | 834190 | Combat Training Ranges                              | -        | 28.106 | -        | 34.850  | -        | 115.198 | -        | 0.000  | -        | 115.198 |
| 31    | А            | 834210 | Minimum Essential<br>Emergency Comm N               | -        | 5.232  | -        | 198.925 | -        | 0.292   | -        | 0.000  | -        | 0.292   |
| 32    | А            | 834240 | Wide Area Surveillance<br>(WAS)                     | -        | 0.000  | -        | 6.943   | -        | 62.087  | -        | 0.000  | -        | 62.087  |
| 33    | Α            | 834320 | C3 Countermeasures                                  | -        | 7.453  | -        | 20.200  | -        | 37.764  | -        | 0.000  | -        | 37.764  |
| 34    | Α            | 834430 | GCSS-AF Fos   |          | 5.296  | -        | 1.743   | -        | 2.826   | -        | 0.000  | -        | 2.826   |
| 35    | A            | 834470 | Defense Enterprise<br>Accounting and Mgmt<br>System | -        | 4.755  | -        | 0.000   | -        | 1.514   | -        | 0.000  | -        | 1.514   |

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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 4: Spcl Comm-Electronics Projects

#### **Cost (\$ in Millions)**

|                    |             |        |                                       | FY 2     | 2016    | FY 2     | 2017    | FY 201   | 8 Base  | FY 201   | 8 OCO  | FY 201   | 8 Total |
|--------------------|-------------|--------|---------------------------------------|----------|---------|----------|---------|----------|---------|----------|--------|----------|---------|
| Line#              | Cos<br>Type |        | Line Item Title                       | Quantity | Amount  | Quantity | Amount  | Quantity | Amount  | Quantity | Amount | Quantity | Amount  |
| 36                 | А           | 834520 | Theater Battle Mgt C2<br>System       | -        | 7.473   | -        | 9.659   | -        | 9.646   | -        | 0.000  | -        | 9.646   |
| 37                 | А           | 834530 | Air & Space Operations<br>Ctr-WPN SYS | -        | 9.993   | -        | 15.474  | -        | 25.533  | -        | 0.000  | -        | 25.533  |
| 38                 | А           | 834560 | Air Operations Center (AOC) 10.2      | -        | 14.846  | -        | 30.623  | -        | 0.000   | -        | 0.000  | -        | 0.000   |
| 39                 | А           | 834880 | Spectrum Relocation Fund              | -        | 19.298  | -        | 0.000   | -        | 0.000   | -        | 0.000  | -        | 0.000   |
| Total: Electronics |             |        | ons Equip / Spcl Comm-                | -        | 253.211 | -        | 713.299 | -        | 522.269 | -        | 3.000  | -        | 525.269 |

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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 5: Air Force Communications

#### **Cost (\$ in Millions)**

|             |              |                       |  | FY 2     | 2016    | FY 2     | 2017    | FY 201   | 8 Base  | FY 201   | 8 OCO  | FY 201   | 8 Total |
|-------------|--------------|-----------------------|--|----------|---------|----------|---------|----------|---------|----------|--------|----------|---------|
| Line#       | Cost<br>Type |                       | Line Item Title                                  | Quantity | Amount  | Quantity | Amount  | Quantity | Amount  | Quantity | Amount | Quantity | Amount  |
| 40          | А            | 835060                | Base Information Transpt<br>Infrast (BITI) Wired | -        | 74.621  | -        | 40.043  | -        | 28.159  | -        | 0.000  | -        | 28.159  |
| 41          | Α            | 835080                | AFNET  | -        | 98.143  | -        | 146.897 | -        | 160.820 | -        | 0.000  | -        | 160.820 |
| 42          | А            | 835110                | Joint Communications<br>Support Element (JCSE)   | -        | 5.199   | -        | 5.182   | -        | 5.135   | -        | 0.000  | -        | 5.135   |
| 43          | Α            | 835140                | USCENTCOM  | -        | 25.780  | -        | 13.418  | -        | 18.719  | -        | 0.000  | -        | 18.719  |
| Total: Elec |              | and Telecommunication | ons Equip / Air Force                            | -        | 203.743 | -        | 205.540 | -        | 212.833 | -        | 0.000  | -        | 212.833 |

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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base

#### **Cost (\$ in Millions)**

|                                |   |        |                                | FY 2     | 2016    | FY 2     | 2017    | FY 201   | 8 Base  | FY 201   | 8 OCO  | FY 201   | 8 Total |
|--------------------------------|---|--------|--------------------------------|----------|---------|----------|---------|----------|---------|----------|--------|----------|---------|
| Line#                          | Cos<br>Type   |        | Line Item Title                | Quantity | Amount  | Quantity | Amount  | Quantity | Amount  | Quantity | Amount | Quantity | Amount  |
| 44                             | Α   | 837100 | Tactical C-E Equipment         | -        | 138.969 | -        | 152.136 | -        | 123.206 | -        | 0.000  | -        | 123.206 |
| 45                             | А   | 837170 | Combat Survivor Evader Locater | -        | 0.000   | -        | 0.000   | -        | 3.004   | -        | 0.000  | -        | 3.004   |
| 46                             | Α   | 837190 | Radio Equipment                | -        | 8.400   | -        | 16.266  | -        | 15.736  | -        | 0.000  | -        | 15.736  |
| 47                             | А   | 837240 | CCTV/Audiovisual<br>Equipment  | -        | 6.144   | -        | 7.449   | -        | 5.480   | -        | 0.000  | -        | 5.480   |
| 48                             | А   | 837300 | Base Comm<br>Infrastructure    | -        | 83.730  | -        | 169.715 | -        | 130.539 | -        | 55.000 | -        | 185.539 |
| <b>Total:</b> Elec<br>and Base | tal: Electronics and Telecommunications Equip / Organization d Base |        |                                |          | 237.243 | -        | 345.566 | -        | 277.965 | -        | 55.000 | -        | 332.965 |

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Appropriation 3080F: Other Procurement, Air Force

BA 03: Electronics and Telecommunications Equip / BSA 8: Modifications

#### **Cost (\$ in Millions)**

|             |  |        |                 | FY 2016  |        | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
|-------------|--|--------|-----------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
| Line#       | Cos<br>Type  |        | Line Item Title | Quantity | Amount  |
| 49          | Α  | 838010 | Comm Elect Mods | -        | 78.650 | -        | 69.500 | -        | 70.798 | -        | 0.000  | -        | 70.798  |
| Total: Elec | <b>Total:</b> Electronics and Telecommunications Equip / Modifications |        |                 | -        | 78.650 | -        | 69.500 | -        | 70.798 | -        | 0.000  | -        | 70.798  |

Appropriation 3080F: Other Procurement, Air Force

BA 04: Other Base Maintenance and Support Equip / BSA 2: Personal Safety & Rescue Equip

#### Cost (\$ in Millions)

|       |             |        |                                | σου (ψ m minone) |        |          |        |          |        |          |        |          |         |
|-------|-------------|--------|--------------------------------|------------------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
|       |             |        |                                | FY 2016          |        | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line# | Cos<br>Type |        | Line Item Title                | Quantity         | Amount | Quantity | Amount | Quantity | Amount | Quantity | Amount | Quantity | Amount  |
| 50    | Α           | 842140 | Night Vision Goggles           | -                | 5.950  | -        | 0.000  | -        | 0.000  | -        | 0.000  | -        | 0.000   |
| 51    | А           | 842990 | Items Less Than \$5<br>Million | -                | 73.030 | -        | 71.016 | -        | 52.964 | -        | 8.469  | -        | 61.433  |

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Appropriation 3080F: Other Procurement, Air Force

BA 04: Other Base Maintenance and Support Equip / BSA 2: Personal Safety & Rescue Equip

#### **Cost (\$ in Millions)**

|   |              |             |                 |          |        |          |        | ( ,      | /      |          |        |          |         |
|---|--------------|-------------|-----------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
|   |              |             |                 | FY 2016  |        | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line#   | Cost<br>Type | Line Item # | Line Item Title | Quantity | Amount  |
| <b>Total:</b> Other Base Maintenance and Support Equip / Personal Safety & Rescue Equip |              |             |                 | -        | 78.980 | -        | 71.016 | -        | 52.964 | -        | 8.469  | -        | 61.433  |

Appropriation 3080F: Other Procurement, Air Force

BA 04: Other Base Maintenance and Support Equip / BSA 3: Depot Plant+Mtrls Handling Eq

#### Cost (\$ in Millions)

|  |              |        |                                       |          |        |          |        |          | ,      |          |        |          |         |
|--|--------------|--------|---------------------------------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
|  |              |        |                                       | FY 2     | 2016   | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 18 OCO | FY 201   | 8 Total |
| Line#  | Cost<br>Type |        | Line Item Title                       | Quantity | Amount  |
| 52   | А            | 843050 | Mechanized Material<br>Handling Equip | -        | 7.249  | -        | 14.688 | -        | 10.381 | -        | 0.000  | -        | 10.381  |
| <b>Total:</b> Other Base Maintenance and Support Equip / Depot Plant Mtrls Handling Eq |              |        | -                                     | 7.249    | -      | 14.688   | -      | 10.381   | -      | 0.000    | -      | 10.381   |         |

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Appropriation 3080F: Other Procurement, Air Force

BA 04: Other Base Maintenance and Support Equip / BSA 5: Base Support Equipment

#### **Cost (\$ in Millions)**

|                          |              |                       |                                | FY 2     | 2016    | FY       | 2017    | FY 201   | 8 Base | FY 201   | 8 OCO   | FY 201   | 8 Total |
|--------------------------|--------------|-----------------------|--------------------------------|----------|---------|----------|---------|----------|--------|----------|---------|----------|---------|
| Line#                    | Cost<br>Type |                       | Line Item Title                | Quantity | Amount  | Quantity | Amount  | Quantity | Amount | Quantity | Amount  | Quantity | Amount  |
| 53                       | А            | 845010                | Base Procured Equipment        | -        | 13.595  | -        | 6.852   | -        | 15.038 | -        | 7.500   | -        | 22.538  |
| 54                       | А            | 845100                | ENGINEERING AND EOD EQUIPMENT  | -        | 56.806  | -        | 274.900 | -        | 26.287 | -        | 80.427  | -        | 106.714 |
| 55                       | Α            | 845420                | Mobility Equipment             | -        | 66.986  | -        | 43.128  | -        | 8.470  | -        | 0.000   | -        | 8.470   |
| 56                       | А            | 845990                | Items Less Than \$5<br>Million | -        | 34.707  | -        | 28.427  | -        | 28.768 | -        | 110.405 | -        | 139.173 |
| Total: Othe<br>Equipment |              | e Maintenance and Sup | port Equip / Base Support      | -        | 172.094 | -        | 353.307 | -        | 78.563 | -        | 198.332 | -        | 276.895 |

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Appropriation 3080F: Other Procurement, Air Force

BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects

#### **Cost (\$ in Millions)**

|                           |              |                     |                                       | FY 2     | 2016    | FY 2     | 2017    | FY 201   | 8 Base    | FY 201   | 8 OCO  | FY 201   | 8 Total   |
|---------------------------|--------------|---------------------|---------------------------------------|----------|---------|----------|---------|----------|-----------|----------|--------|----------|-----------|
| Line#                     | Cost<br>Type |                     | Line Item Title                       | Quantity | Amount  | Quantity | Amount  | Quantity | Amount    | Quantity | Amount | Quantity | Amount    |
| 58                        | Α            | 846070              | DARP RC135                            | -        | 23.973  | -        | 25.287  | -        | 25.985    | -        | 0.700  | -        | 26.68     |
| 59                        | Α            | 846080              | DCGS-AF                               | -        | 177.021 | -        | 198.455 | -        | 178.423   | -        | 9.200  | -        | 187.623   |
| 61                        | Α            | 846510              | Special Update Program                | -        | 629.371 | -        | 577.710 | -        | 840.980   | -        | 0.000  | -        | 840.980   |
| 62                        | А            | 846570              | Defense Space<br>Reconnaissance Prog. | -        | 128.724 | -        | 0.000   | -        | 0.000     | -        | 0.000  | -        | 0.000     |
| Total: Othe<br>Support Pr |              | Maintenance and Sup | port Equip / Special                  | -        | 959.089 | -        | 801.452 | -        | 1,045.388 | -        | 9.900  | -        | 1,055.288 |

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Appropriation 3080F: Other Procurement, Air Force

BA 05: Spares and Repair Parts / BSA 1: Spares And Repair Parts

#### **Cost (\$ in Millions)**

|            |   |        |                         | ,        |        |          |        |          |        |          |        |          |         |
|------------|---|--------|-------------------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|---------|
|            |   |        |                         | FY 2016  |        | FY 2     | 2017   | FY 201   | 8 Base | FY 201   | 8 OCO  | FY 201   | 8 Total |
| Line#      | Cost<br>Type  |        | Line Item Title         | Quantity | Amount  |
| 64-65      | Α   | 861900 | Spares and Repair Parts | -        | 59.863 | -        | 16.600 | -        | 26.675 | -        | 0.000  | -        | 26.675  |
| Total: Spa | <b>Total:</b> Spares and Repair Parts / Spares And Repair Parts |        |                         | -        | 59.863 | -        | 16.600 | -        | 26.675 | -        | 0.000  | -        | 26.675  |

Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Listing by Model)

## **Lookup Matrix by Model**

| Model: IBS  |            |                            |  |  |  |  |  |  |  |  |  |
|---|------------|----------------------------|--|--|--|--|--|--|--|--|--|
| Modification P-40a Aggregated Items Title: Integrated Broadcast Service (IBS) |            |                            |  |  |  |  |  |  |  |  |  |
| Item Number   | Item Title | Applies to Multiple Models |  |  |  |  |  |  |  |  |  |
| Uncategorized   |            |                            |  |  |  |  |  |  |  |  |  |
| Mod 1 IBS   | Mod 1 IBS  | No                         |  |  |  |  |  |  |  |  |  |
| Mod 2   | Mod 2      | No                         |  |  |  |  |  |  |  |  |  |
| Mod 3   | Mod 3      | No                         |  |  |  |  |  |  |  |  |  |
| Mod 4   | Mod 4      | No                         |  |  |  |  |  |  |  |  |  |
| Mod 5   | Mod 5      | No                         |  |  |  |  |  |  |  |  |  |

| Model: 0301592F           | Model: 0301592F   |            |                            |  |  |  |  |  |  |  |  |
|---------------------------|---|------------|----------------------------|--|--|--|--|--|--|--|--|
| Modification P-40a Aggreg | Modification P-40a Aggregated Items Title: Military Intelligence Program (MIP) Activities |            |                            |  |  |  |  |  |  |  |  |
| Item Number               |   | Item Title | Applies to Multiple Models |  |  |  |  |  |  |  |  |
| Uncategorized             | Uncategorized   |            |                            |  |  |  |  |  |  |  |  |
| MIP1                      | JWICS   |            | No                         |  |  |  |  |  |  |  |  |

| Model: NA                                      |   |                                   |               |  |  |  |  |  |  |  |
|--|---|-----------------------------------|---------------|--|--|--|--|--|--|--|
| Modification P-40a Aggre                       | Modification P-40a Aggregated Items Title: Network-Centric Collaborative Targeting        |                                   |               |  |  |  |  |  |  |  |
| Item Number Item Title Applies to Multi        |   |                                   |               |  |  |  |  |  |  |  |
| Uncategorized                                  | Uncategorized   |                                   |               |  |  |  |  |  |  |  |
| NCCT1  | Replacement of  | Replacement of Ground Stations No |               |  |  |  |  |  |  |  |
| Modification P-40a Aggre                       | Modification P-40a Aggregated Items Title: Ballistic Missile Early Warning System (BMEWS) |                                   |               |  |  |  |  |  |  |  |
| Item Number Item Title Applies to Multiple Mod |   |                                   |               |  |  |  |  |  |  |  |
| Uncategorized                                  |   |                                   | Jncategorized |  |  |  |  |  |  |  |

Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Listing by Model)

| Model: NA   |                   |  |                            |  |  |  |  |
|---|-------------------|--|----------------------------|--|--|--|--|
| Modification P-40a Aggregated Items Title: Ballistic Missile Early Warning System (BMEWS)                   |                   |  |                            |  |  |  |  |
| Item Number   |                   | Item Title   | Applies to Multiple Models |  |  |  |  |
| COBRA DANE Radar Mod  | COBRA DANE F      | Radar Mod  | No                         |  |  |  |  |
| Mod HEMP  | Mod HEMP          |  | No                         |  |  |  |  |
| P-3A BMEWS Modification   | BMEWS Modific     | ation  | No                         |  |  |  |  |
| Modification P-40a Aggregated Items Title: Submarine-Launched Ballistic Missile (SLBM) Radar Warning System |                   |  |                            |  |  |  |  |
| Item Number   |                   | Item Title   | Applies to Multiple Models |  |  |  |  |
| Uncategorized   |                   |  |                            |  |  |  |  |
| P-3A PAVE PAWS<br>Modifications   | P-3A PAVE PAV     | VS Modification (formerly PAVE PAWS Front End)                   | No                         |  |  |  |  |
| PAVE PAWS<br>Block 00 Update  | BPP Block 00 SA   | APS ES   | No                         |  |  |  |  |
| Modification P-40a Aggrega  | ated Items Title: | Ballistic Missile Early Warning System (BMEWS)                   |                            |  |  |  |  |
| Item Number   |                   | Item Title   | Applies to Multiple Models |  |  |  |  |
| Uncategorized   |                   |  |                            |  |  |  |  |
| BMEWS   | BMEWS DP SP       |  | No                         |  |  |  |  |
| BMEWS2  | BMEWS Block 0     | 2  | No                         |  |  |  |  |
| Modification P-40a Aggrega  | ated Items Title: | Submarine-Launched Ballistic Missile (SLBM) Radar Warning System |                            |  |  |  |  |
| Item Number   |                   | Item Title   | Applies to Multiple Models |  |  |  |  |
| Uncategorized   |                   |  |                            |  |  |  |  |
| PARCSB0   | PARCS Block 00    |  | No                         |  |  |  |  |
| PARCSB1   | PARCS Block 01    |  | No                         |  |  |  |  |
| PPB02   | Pave Paws Bloc    | k 02   | No                         |  |  |  |  |

Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Listing by Model)

| Model: OMMOD  |                    |                                      |                            |  |  |  |  |  |
|---|--------------------|--------------------------------------|----------------------------|--|--|--|--|--|
| Modification P-40a Aggregated Items Title: TACSI Mods |                    |                                      |                            |  |  |  |  |  |
| Item Number   |                    | Item Title                           | Applies to Multiple Models |  |  |  |  |  |
| Uncategorized   |                    |                                      |                            |  |  |  |  |  |
| TYQ23A  | AN/TYQ23A OM       | MOD                                  | No                         |  |  |  |  |  |
| Model: CRCPhase1                                      |                    |                                      |                            |  |  |  |  |  |
| P-3a Individual Modification                          | ons                |                                      |                            |  |  |  |  |  |
| Modification Number                                   |                    | Modification Title                   | Applies to Multiple Models |  |  |  |  |  |
| 1   | CRC Phase 1        |                                      | No                         |  |  |  |  |  |
| Model: NWM  | <del></del>        |                                      |                            |  |  |  |  |  |
| Modification P-40a Aggre                              | gated Items Title: | WOF                                  |                            |  |  |  |  |  |
| Item Number   |                    | Item Title                           | Applies to Multiple Models |  |  |  |  |  |
| Uncategorized   |                    |                                      |                            |  |  |  |  |  |
| WOF2  | Numerical Weath    | ner Modeling (NWM)                   | No                         |  |  |  |  |  |
| Model: CAMIS  |                    |                                      |                            |  |  |  |  |  |
| Modification P-40a Aggre                              | gated Items Title: | Service Academies                    |                            |  |  |  |  |  |
| Item Number   |                    | Item Title                           | Applies to Multiple Models |  |  |  |  |  |
| Uncategorized   |                    |                                      |                            |  |  |  |  |  |
| CAMIS   | Cadet Administra   | ation Management linformation System | No                         |  |  |  |  |  |

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Model: Bases

CTR02

CTR03

CEAR UMTE Mod

CEAR Mini MUTES Mod

| Modification P-40a Aggreg    | gated Items Title: Base Physical Security Systems  |                            |
|------------------------------|--|----------------------------|
| Item Number                  | Item Title   | Applies to Multiple Models |
| Uncategorized                |  |                            |
| EUJUON                       | EUCOM JUON   | No                         |
| P-3a Individual Modification | ons  |                            |
| Modification Number          | Modification Title                                 | Applies to Multiple Models |
| 1                            | Base Physical Security Systems                     | No                         |
| 2                            | Counter small - UAS                                | No                         |
| 3                            | IBDSS-1  | No                         |
|                              | gated Items Title: Combat Training Range Equipment |                            |
| Item Number                  | Item Title   | Applies to Multiple Models |
| Uncategorized                |  |                            |
| CTR01                        | Combat Training Ranges Joint Threat Emitter        | No                         |
| Model: CombatTrainingR       | ange   |                            |
| Modification P-40a Aggree    | gated Items Title: Combat Training Range Equipment |                            |
| Item Number                  | Item Title   | Applies to Multiple Models |
| Uncategorized                |  |                            |
|                              |  |                            |

#### **UNCLASSIFIED**

No

No

Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Listing by Model)

| Model: BITI                 |   |                            |
|-----------------------------|---|----------------------------|
| P-3a Individual Modificatio | ns  |                            |
| Modification Number         | Modification Title                                  | Applies to Multiple Models |
| 1                           | BITI Mod/Recaps                                     | No                         |
| Model: ACD-AFINC-CSCS       |   |                            |
| Modification P-40a Aggreg   | ated Items Title: AF Network Ops and Command Comms  |                            |
| Item Number                 | Item Title  | Applies to Multiple Models |
| Uncategorized               |   |                            |
| AFNET Ops and Command Comms | AFNET Ops and Command Comms                         | No                         |
| Model: ACD                  |   |                            |
| P-3a Individual Modificatio | ns  |                            |
| Modification Number         | Modification Title                                  | Applies to Multiple Models |
| 1                           | ACD WS 0208088F                                     | No                         |
| Model: AFINC-CSCS-WS        |   |                            |
| P-3a Individual Modificatio | ns  |                            |
| Modification Number         | Modification Title                                  | Applies to Multiple Models |
| 1                           | AFINC/CSCS WS 0303089                               | No                         |
| Model: AFNET                |   |                            |
| Modification P-40a Aggreg   | ated Items Title: Air Force Communications (AIRCOM) |                            |
| Item Number                 | Item Title  | Applies to Multiple Models |
| Uncategorized               |   |                            |

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| Model: AFNET             |                      |                                   |                            |
|--------------------------|----------------------|-----------------------------------|----------------------------|
| Modification P-40a Aggre | egated Items Title:  | Air Force Communications (AIRCOM) |                            |
| Item Number              |                      | Item Title                        | Applies to Multiple Models |
| Mod 1 0303112F           | AFNET                |                                   | No                         |
| Model: ANFMQ7            |                      |                                   |                            |
| Modification P-40a Aggre | egated Items Title:  | Weather Service                   |                            |
| Item Number              |                      | Item Title                        | Applies to Multiple Models |
| Uncategorized            |                      |                                   | ,                          |
| 08-001                   | AN/FMQ-7 Sola        | Optical Observing Network (SOON)  | No                         |
| Model: ANUMQ13           |                      | Weather Oranica                   |                            |
| Modification P-40a Aggre | egated items little: | Weather Service Item Title        | Applies to Multiple Models |
| Uncategorized            |                      |                                   | ,                          |
| 09-001                   | AN/UMQ-13 MA         | RK IV-B                           | No                         |
| Model: WSR-88D           |                      |                                   |                            |
| Modification P-40a Aggre | egated Items Title:  | Weather Service                   |                            |
| Item Number              |                      | Item Title                        | Applies to Multiple Models |
| Uncategorized            |                      |                                   |                            |
| 14-001                   | Next Generation      | Radar (NEXRAD) WSR-88D IT Refresh | No                         |

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| Model:  | ANFRR95   |                   |  |                            |  |  |  |  |  |
|---|---|-------------------|--|----------------------------|--|--|--|--|--|
| Modific   | Modification P-40a Aggregated Items Title: Weather Service  |                   |  |                            |  |  |  |  |  |
| ı   | tem Number  |                   | Item Title   | Applies to Multiple Models |  |  |  |  |  |
| Uncate  | Uncategorized   |                   |  |                            |  |  |  |  |  |
|   | 14-007  | Radio Solar Tele  | escope Network Service Life Extension Program (RSTN SLEP)  | Yes                        |  |  |  |  |  |
| Model:  | AF24U1  |                   |  |                            |  |  |  |  |  |
| Modific   | ation P-40a Aggreg  | ated Items Title: | Weather Service  |                            |  |  |  |  |  |
| ı   | tem Number  |                   | Item Title   | Applies to Multiple Models |  |  |  |  |  |
| Uncate  | gorized   |                   |  |                            |  |  |  |  |  |
| 14-007 Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP) |   |                   |  |                            |  |  |  |  |  |
| No dele   | ıer   |                   |  |                            |  |  |  |  |  |
| Model:  |   |                   | W 41 - 2 - 1   |                            |  |  |  |  |  |
|   | ation P-40a Aggreg  | ated Items Title: |  |                            |  |  |  |  |  |
| I   | tem Number  |                   | Item Title   | Applies to Multiple Models |  |  |  |  |  |
| Uncate  | gorized   |                   |  |                            |  |  |  |  |  |
|   | 16-001  | Joint Environme   | ntal Toolkit (JET) Refresh                                 | No                         |  |  |  |  |  |
| NA - d - l  | ODN 00  |                   |  |                            |  |  |  |  |  |
|   | GRN-29  |                   |  |                            |  |  |  |  |  |
| Modific   | ation P-40a Aggreg  | ated Items Title: | Air Traffic Control, Approach, and Landing System (ATCALS) |                            |  |  |  |  |  |
| I   | tem Number  |                   | Item Title   | Applies to Multiple Models |  |  |  |  |  |
| Uncate  | gorized   |                   |  |                            |  |  |  |  |  |
|   | AN/GRN-29 Instrument Landing System  ATCALS AN/GRN-29 Instrument Landing System (PE 0305114F)  No |                   |  |                            |  |  |  |  |  |

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| Model: TRN-48                          |   |                            |  |  |  |  |  |  |
|--|---|----------------------------|--|--|--|--|--|--|
| Modification P-40a Aggreg              | Modification P-40a Aggregated Items Title: Air Traffic Control, Approach, and Landing System (ATCALS) |                            |  |  |  |  |  |  |
| Item Number                            | Item Title  | Applies to Multiple Models |  |  |  |  |  |  |
| Uncategorized                          |   |                            |  |  |  |  |  |  |
| ATCALS                                 | Deployable TACAN Retrofit/Refurbishment   | No                         |  |  |  |  |  |  |
| Model: ATCALS                          |   |                            |  |  |  |  |  |  |
| Modification P-40a Aggreg              | gated Items Title: Air Traffic Control, Approach, and Landing System (ATCALS)                         |                            |  |  |  |  |  |  |
| Item Number                            | Item Title  | Applies to Multiple Models |  |  |  |  |  |  |
| Uncategorized                          |   |                            |  |  |  |  |  |  |
| P-3A Low Cost Mods                     | ATCALS Low Cost Mods (PE 0305114F)  | No                         |  |  |  |  |  |  |
| Model: NASMod-1                        |   |                            |  |  |  |  |  |  |
| P-3a Individual Modification           | ons   |                            |  |  |  |  |  |  |
| Modification Number                    | Modification Title  | Applies to Multiple Models |  |  |  |  |  |  |
| 1                                      | NAS Gen4 MOD  | No                         |  |  |  |  |  |  |
| Model: Raytheon                        |   |                            |  |  |  |  |  |  |
| Modification P-40a Aggree              | gated Items Title: Ballistic Missile Early Warning System (BMEWS)                                     |                            |  |  |  |  |  |  |
| Item Number                            | Item Title  | Applies to Multiple Models |  |  |  |  |  |  |
| Uncategorized                          |   |                            |  |  |  |  |  |  |
| P-3A BMEWS DP/<br>SP Suite Replacement | BMEWS DP/SP Suite Replacement   | No                         |  |  |  |  |  |  |

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| Model: Exelis   |   |                            |  |  |  |  |  |
|---|---|----------------------------|--|--|--|--|--|
| Modification P-40a Aggregated Items Title: Submarine-Launched Ballistic Missile (SLBM) Radar Warning System |   |                            |  |  |  |  |  |
| Item Number   | Item Title  | Applies to Multiple Models |  |  |  |  |  |
| Uncategorized   |   |                            |  |  |  |  |  |
| P-3A PARCS Modifications  | P-3A PARCS Modification (formerly PARCS PARSS)              | No                         |  |  |  |  |  |
| PARCS Block 00 Update   | PARCS Block 00 Update                                       | No                         |  |  |  |  |  |
| Model: SEWS   |   |                            |  |  |  |  |  |
|   | ated Items Title: Shared Early Warning (SEW)                |                            |  |  |  |  |  |
| Item Number   | Item Title  | Applies to Multiple Models |  |  |  |  |  |
| Uncategorized   | Rem Title   | Applies to multiple models |  |  |  |  |  |
| SEWS1   | Shared Early Warning System (SEWS) Low Cost Mods            | No                         |  |  |  |  |  |
|   |   |                            |  |  |  |  |  |
| Model: RC135  |   |                            |  |  |  |  |  |
| P-3a Individual Modification  | ns  |                            |  |  |  |  |  |
| Modification Number   | Modification Title  | Applies to Multiple Models |  |  |  |  |  |
| 1   | DARP Modification   | No                         |  |  |  |  |  |
| Model: 0305208F   |   |                            |  |  |  |  |  |
|   | ated Items Title: Distributed Common Ground/Surface Systems |                            |  |  |  |  |  |
| Item Number   | Item Title  | Applies to Multiple Models |  |  |  |  |  |
|   | item Title  | Applies to Multiple Models |  |  |  |  |  |
| Uncategorized   | 0 " 11 4 11"  |                            |  |  |  |  |  |
| DCGS1 Geospatial Intelligence Bulk Release (GB) 4.1 No  |   |                            |  |  |  |  |  |
| DCGS13  | NASIC   | No                         |  |  |  |  |  |
| DCGS4   | Multi-Intelligence (Multi-INT)  No                          |                            |  |  |  |  |  |

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| Model: 0305208F  |   |                            |  |  |  |  |  |
|--|---|----------------------------|--|--|--|--|--|
| Modification P-40a Aggregated Items Title: Distributed Common Ground/Surface Systems |   |                            |  |  |  |  |  |
| Item Number  | Item Title                              | Applies to Multiple Models |  |  |  |  |  |
| DCGS5  | Sensor Integration                      | No                         |  |  |  |  |  |
| DCGS6  | System Release (SR) 3.0                 | No                         |  |  |  |  |  |
| P-3a Individual Modification   | is .                                    |                            |  |  |  |  |  |
| Modification Number  | Modification Title                      | Applies to Multiple Models |  |  |  |  |  |
| 2  | Network Infrastructure Transformation   | No                         |  |  |  |  |  |
| 3  | Signals Intelligence (SIGINT)           | No                         |  |  |  |  |  |
| 4  | DCGS Reference Imagery Transition (DRT) | No                         |  |  |  |  |  |

| Model:    | DCGS                 |                                |                            |
|-----------|----------------------|--------------------------------|----------------------------|
| P-3a Indi | ividual Modification | s                              |                            |
| Modif     | ication Number       | Modification Title             | Applies to Multiple Models |
|           | 1                    | GEOINT Transformation (GEOINT) | No                         |

# Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Funding for Modifications)

## Funding (\$ M)

| Modification P-40a Item Title<br>P-3a Modification Title                 | PYS    | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|--|--------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| Exhibit P-40a  |        |         |         |                 |                |                  |         |         |         |         |
| Mod 1 IBS  | 5.258  | 1.548   | 3.741   | 3.354           | 0.000          | 3.354            | -       | -       | -       | -       |
| Mod 2  | 6.275  | 3.167   | 3.167   | 3.133           | 0.000          | 3.133            | -       | -       | -       | -       |
| Mod 3  | 2.572  | 0.816   | 1.298   | 1.463           | 0.000          | 1.463            | -       | -       | -       | -       |
| Mod 4  | 4.165  | 2.102   | 2.370   | 2.276           | 0.000          | 2.276            | -       | -       | -       | -       |
| Mod 5  | 2.933  | 5.473   | 1.873   | 3.057           | 0.000          | 3.057            | -       | -       | -       | -       |
| JWICS  | 3.920  | 2.900   | 4.516   | 4.434           | 0.000          | 4.434            | -       | -       | -       | -       |
| Replacement of Ground Stations   | 2.970  | 3.517   | 2.583   | 3.312           | 0.000          | 3.312            | -       | -       | -       | -       |
| AN/TYQ23A OM MOD   | -      | 22.710  | 1.163   | 4.450           | -              | 4.450            | -       | -       | -       | -       |
| Numerical Weather Modeling (NWM)   | 0.000  | 5.736   | 3.850   | 9.829           | 0.000          | 9.829            | -       | -       | -       | -       |
| Cadet Administration Management Iinformation System                      | -      | -       | 3.300   | 9.103           | -              | 9.103            | -       | -       | -       | -       |
| EUCOM JUON   | -      | -       | 76.000  | -               | -              | -                | -       | -       | -       | -       |
| Combat Training Ranges Joint Threat Emitter                              | -      | 3.651   | -       | 3.184           | -              | 3.184            | -       | -       | -       | -       |
| CEAR UMTE Mod  | -      | 7.000   | 3.900   | 0.150           | -              | 0.150            | -       | -       | -       | -       |
| CEAR Mini MUTES Mod  | -      | -       | -       | 0.150           | -              | 0.150            | -       | -       | -       | -       |
| AFNET Ops and Command Comms  | -      | 49.049  | -       | -               | -              | -                | -       | -       | -       | -       |
| AFNET  | 90.487 | 29.448  | 28.465  | -               | -              | -                | -       | -       | -       | -       |
| AN/FMQ-7 Solar Optical Observing Network (SOON)                          | -      | -       | 1.000   | -               | -              | -                | -       | -       | -       | -       |
| AN/UMQ-13 MARK IV-B  | 6.756  | 0.000   | 1.000   | 1.500           | -              | 1.500            | -       | -       | -       | -       |
| Next Generation Radar (NEXRAD) WSR-88D IT Refresh                        | -      | 2.750   | 3.508   | 4.732           | -              | 4.732            | -       | -       | -       | -       |
| Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP) | -      | 3.100   | -       | 0.800           | -              | 0.800            | -       | -       | -       | -       |

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| Modification P-40a Item Title<br>P-3a Modification Title   | PYS    | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|--|--------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| Joint Environmental Toolkit (JET) Refresh                  | -      | -       | 1.466   | 2.123           | -              | 2.123            | -       | -       | -       | -       |
| ATCALS AN/GRN-29 Instrument Landing System (PE 0305114F)   | 37.903 | 3.219   | 7.121   | 1.006           | -              | 1.006            | -       | -       | -       | -       |
| Deployable TACAN Retrofit/Refurbishment                    | -      | -       | 3.800   | -               | -              | -                | -       | -       | -       | -       |
| ATCALS Low Cost Mods (PE 0305114F)                         | -      | 0.761   | 1.402   | 1.640           | -              | 1.640            | -       | -       | -       | -       |
| COBRA DANE Radar Mod                                       | -      | 0.150   | -       | -               | -              | -                | -       | -       | -       | -       |
| Mod HEMP   | -      | 49.000  | -       | -               | -              | -                | -       | -       | -       | -       |
| BMEWS DP/SP Suite Replacement                              | 37.616 | 9.858   | 29.610  | -               | -              | -                | -       | -       | -       | -       |
| BMEWS Modification   | 3.565  | 0.100   | -       | -               | -              | -                | -       | -       | -       | -       |
| P-3A PARCS Modification (formerly PARCS PARSS)             | -      | -       | 0.750   | -               | -              | -                | -       | -       | -       | -       |
| P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End) | -      | -       | 1.553   | -               | -              | -                | -       | -       | -       | -       |
| PARCS Block 00 Update                                      | -      | -       | 4.240   | -               | -              | -                | -       | -       | -       | -       |
| BPP Block 00 SAPS ES                                       | -      | -       | 10.456  | -               | -              | -                | -       | -       | -       | -       |
| Shared Early Warning System (SEWS) Low Cost Mods           | -      | 0.220   | 0.403   | 0.392           | 0.000          | 0.392            | -       | -       | -       | -       |
| BMEWS DP SP  | -      | -       | -       | 0.500           | -              | 0.500            | -       | -       | -       | -       |
| BMEWS Block 02   | -      | -       | -       | 5.100           | -              | 5.100            | -       | -       | -       | -       |
| PARCS Block 00   | -      | -       | -       | 9.104           | -              | 9.104            | -       | -       | -       | -       |
| PARCS Block 01   | -      | -       | -       | 0.500           | -              | 0.500            | -       | -       | -       | -       |
| Pave Paws Block 02   | -      | -       | -       | 0.300           | -              | 0.300            | -       | -       | -       | -       |
| Geospatial Intelligence Bulk Release (GB) 4.1              | -      | 6.120   | 0.004   | 0.000           | 0.000          | 0.000            | -       | -       | -       | -       |
| NASIC  | -      | -       | 0.800   | 0.000           | 1.800          | 1.800            | -       | -       | -       | -       |
| Multi-Intelligence (Multi-INT)                             | -      | 15.616  | 11.032  | 6.732           | 0.000          | 6.732            | -       | -       | -       | -       |
| Sensor Integration   | -      | 8.762   | 20.179  | 6.038           | 0.000          | 6.038            | -       | -       | -       | -       |

# Air Force • Budget Estimates FY 2018 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Funding for Modifications)

| Modification P-40a Item Title<br>P-3a Modification Title | PYS     | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|--|---------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| System Release (SR) 3.0                                  | -       | 9.009   | 15.397  | 0.000           | 0.000          | 0.000            | -       | -       | -       | -       |
| Exhibit P-3a   |         |         |         |                 |                | ,                |         |         |         |         |
| CRC Phase 1  | -       | 0.000   | 0.000   | 18.783          | 4.970          | 23.753           | -       | -       | -       | -       |
| Base Physical Security Systems                           | -       | 63.291  | 18.613  | 34.408          | 0.000          | 34.408           | -       | -       | -       | -       |
| Counter small - UAS                                      | -       | 0.000   | 70.500  | 136.000         | 0.000          | 136.000          | -       | -       | -       | -       |
| IBDSS-1  | -       | 0.000   | 65.869  | 16.029          | 0.000          | 16.029           | -       | -       | -       | -       |
| BITI Mod/Recaps  | 0.000   | 0.000   | 0.000   | 28.159          | 0.000          | 28.159           | -       | -       | -       | -       |
| ACD WS 0208088F  | -       | 0.000   | 7.736   | 30.914          | 0.000          | 30.914           | -       | -       | -       | -       |
| AFINC/CSCS WS 0303089                                    | -       | 17.309  | 105.586 | 129.906         | 0.000          | 129.906          | -       | -       | -       | -       |
| NAS Gen4 MOD   | -       | -       | 1.519   | 12.718          | 0.000          | 12.718           | -       | -       | -       | -       |
| DARP Modification  | -       | 23.973  | 25.287  | 25.985          | 0.700          | 26.685           | -       | -       | -       | -       |
| GEOINT Transformation (GEOINT)                           | -       | 14.478  | 8.085   | 18.796          | 0.000          | 18.796           | -       | -       | -       | -       |
| Network Infrastructure Transformation                    | -       | 74.182  | 64.935  | 106.550         | 0.000          | 106.550          | -       | -       | -       | -       |
| Signals Intelligence (SIGINT)                            | -       | 0.236   | 29.092  | 8.114           | 7.400          | 15.514           | -       | -       | -       | -       |
| DCGS Reference Imagery Transition (DRT)                  | -       | 16.799  | 19.064  | 10.900          | 0.000          | 10.900           | -       | -       | -       | -       |
| Totals (Total Obligation Authority)                      |         |         |         |                 |                |                  |         |         |         |         |
| Total Obligation Authority                               | 204.420 | 456.050 | 666.233 | 665.624         | 14.870         | 680.494          | 0.000   | 0.000   | 0.000   | 0.000   |

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# **ACRONYMS**

### GENERAL ACRONYMS

A&AS - Advisory & Assistance Services

ABIDES - Automated Budget Interactive Data Environment System

ACAT - Acquisition Category

ACTD - Advanced Concept Technology Demonstration

AGM - Air-to-Ground Missile
AIM - Air Intercept Missile
AIS - Avionics Intermediate Shop

ACMI - Aircraft Combat Maneuvering Instrumentation AMRAAM - Advanced Medium-Range Air-to-Air Missile

APPN - Appropriation

ATD - Advanced Technology Development

BA - Budget Activity

BLSS - Base Level Self-Sufficiency Spares

BY - Budget Year

C3 - Command, Control, and Communication System

CFE - Contractor Furnished Equipment

CONOPS - Concept of Operation
CONUS - Continental United States

CPMS - Comprehensive Power Management System

CPT - Cockpit Procedures Trainer
CRA - Continuing Resolution Authority

CTS - Countermeasures Test Set

CY - Current Year

ECCM - Electronic Counter Counter-Measures

ECM - Electronic Counter Measures
 ECO - Engineering Change Orders
 EOQ - Economic Order Quantity
 ECP - Engineering Change Proposal
 EPA - Economic Price Adjustment

EW - Electronic Warfare

EWAISP - Electronic Warfare Avionics Integration Support Facility

FLIR - Forward Looking Infra Red

FOT&E - Follow-on Test and Evaluation FOC - Fully Operational Capability

FLTS - Flight Line Test Set

FPIF - Fixed Price Incentive Firm

FPIS - Fixed Price Incentive Fee, Successive Targets

FY - Fiscal Year

**GANS** - Global Access Navigation & Safety - Global Air Traffic Management **GATM** - Government Furnished Equipment **GFE GFP** - Government Furnished Property - Global Positioning System **GPS** - Ground Support Equipment **GSE** - Interim Contractor Support **ICS** - Initial Operating Capability IOC **IPE** - Increased Performance Engine

JPALS - Joint Precision Approach and Landing System
MAIS - Major Automated Information System Program

MDAP - Major Defense Acquisition Program
METS - Mobile Electronic Test Stations

MYP - Multiyear Procurement

MSIP - Multi-Stage Improvement Program

NAVWAR
- Navigation Warfare

NMC Rate
- Not Mission Capable Rate
- Operational Flight Program

OT&E
- Operational Test and Evaluation

OWRM
- Other War Reserve Material

PAGEL - Priced Aerospace Ground Equipment List

PB - President's Budget

PGSE - Peculiar Ground Support Equipment PMA - Program Management Administration

PMC - Procurement Method Code

PNO - Acquisition Program Number (MDAP Codes)

PR - Purchase Request

PRCP - Program Resource Collection Process

PTT - Part Task Trainer

PY - Prior Year

R&M - Reliability and Maintainability
RAA - Required Asset Availability

RDT&E - Research, Development, Test and Evaluation

RWR - Radar Warning Receiver ROM - Rough Order of Magnitude

SS - Sole Source

SOF - Special Operation Force TAF - Tactical Air Force

TCAS - Traffic Collision Alert and Avoidance System

TEWS - Tactical Electronic Warfare System
TISS - TEWS Intermediate Support System

TOA - Total Obligation Authority
WCF - Working Capital Fund
WRM - War Reserve Material
WST - Weapon System Trainer
UAV - Unmanned Aerial Vehicle
XML - Extensible Markup Language

## BASE / ORGANIZATIONAL ACRONYMNS

ACC - Air Combat Command

- Air Education & Training Command **AETC AFCAO** - Air Force Computer Acquisition Office - Air Force Civil Engineering Support Agency **AFCESA AFCIC** - AF Communications & Information Center AFCSC - Air Force Cryptologic Service Center - Air Force Engineering Services Center AFESC **AFGWC** - Air Force Global Weather Central **AFIT** - Air Force Institute of Technology

AFLCMC - Air Force Life Cycle Management Center

AFMC - Air Force Materiel Command

AFMETCAL - Air Force Metrology and Calibration Office

AFMLO - Air Force Medical Logistics Office AFOSI - Air Force Office of Special Investigation

AFOTEC - All Force Office of Special Investigation

AFOTEC - Air Force Operational Test & Evaluation Center

AFPC - Air Force Personnel Center

AFPSL - AF Primary Standards Lab

AFR - Air Force Reserve

AFSOC - AF Special Operations Command
AFSPC - Air Force Space Command
AIA - Air Intelligence Agency
ALC - Air Logistics Center
AMC - Air Mobility Command
ANG - Air National Guard

ASC - Aeronautical Systems Center AETC - Air Education Training Command

AU - Air University AWS - Air Weather Service

CIA - Central Intelligence Agency
DGSC - Defense General Support Center
DLA - Defense Logistics Center
DOE - Department of Energy

DPSC - Defense Personnel Support Center
DSCC - Defense Supply Center, Columbus
DTIC - Defense Technical Information Center

ER - Eastern Range

**GSA** 

ESC - Electronic Systems Center
FAA - Federal Aviation Agency
FBI - Federal Bureau of Investigation

JCS - Joint Chiefs of Staff

NATO - North Atlantic Treaty Organization
OSD - Office of the Secretary of Defense

- General Services Administration

PACAF - Pacific Air Forces
USAF - United States Air Force

USAFA - United States Air Force Academy
USAFE - United States Air Force Europe
USCENTCOM - United States Central Command
USEUCOM - United States European Command
USMC - United States Marine Corps

USSTRATCOM - United States Strategic Command

WP AFB - Wright-Patterson AFB, OH

## CONTRACT METHOD / TYPE ACRONYMNS

C - Competitive BA - Basic Agreement

BOA - Basic Ordering Agreement BPA - Blanket Purchasing Agreement

CS - Cost Sharing

IDDQ - Indefinite Delivery, Definite Quantity
 IDIQ - Indefinite Delivery, Indefinite Quantity
 IDRT - Indefinite Delivery, Requirements

Letter - Letter LH - Labor-hour

MIPR - Military Interdepartmental Purchase Request

MIPR-C - Military Interdepartmental Purchase Request - Competitive
MIPR-OPT - Military Interdepartmental Purchase Request - Option
MIPR-OTH - Military Interdepartmental Purchase Request - Other
MIPR-SS - Military Interdepartmental Purchase Request - Sole Source

OPT - Option OTH - Other

PO - Project Order REQN - Requisition SS - Sole Source

T&M - Time and Materials

UCA - Undefinitized Contract Action

WP - Work Project

## CONTRACTED BY ACRONYMNS

11 WING - 11th Support Wing, Washington, DC ACC - Air Combat Command, Langley AFB, VA

AEDC - Arnold Engineering Development Center, Arnold AFB, TN

AAC - Air Armament Center, Eglin AFB, FL

AEDC - Arnold Engineering Development Center, Arnold AFB, TN
AETC - Air Education and Training Command, Randolph AFB, TX

AFCIC - Air Force Communications and Information Center, Washington, DC
AFCESA - Air Force Civil Engineering Support Agency, Tyndall AFB, FL

AFFTC - Air Force Flight Test Center, Edwards AFB, CA

AFLCMC - Air Force Life Cycle Management Center, Wright-Patterson AFB, OH

AFMC - Air Force Materiel Command, Wright-Patterson AFB, OH
AFMETCAL - Air Force Metrology and Calibration Office, Heath, Ohio
- Air Force Medical Logistics Office, Ft Detrick, MD

AIA - Air Intelligence Agency, Kelly AFB, TX
AMC - Air Mobility Command, Scott AFB, IL

ASC - Aeronautical Systems Center, Wright-Patterson AFB, OH & Eglin AFB, FL

AFWA - Air Force Weather Agency, Offutt AFB, NE
DGSC - Defense General Support Center, Richmond, VA
DPSC - Defense Personnel Support Center, Philadelphia, PA

ER - Eastern Range, Patrick AFB, FL

ESC - Electronic Systems Center, Hanscom AFB, MA

HSC - Human Services Center, Brook AFB, TX

OC-ALC - Oklahoma City Air Logistics Center, Tinker AFB, OK

OO-ALC - Ogden Air Logistics Center, Hill AFB, UT

SMC - Space & Missile Systems Center, Los Angeles AFB, CA

US STRATCOM - US Strategic Command, Offutt AFB, NE

WACC - Washington Area Contracting Center, Washington DC

WR - Western Range, Vandenberg AFB, CA

WR-ALC - Warner-Robins Air Logistics Center, Robins AFB, GA

AFSPC - Air Force Space Command, Peterson AFB, CO
HQ ANG - Headquarters, Air National Guard, Washington, DC
USAFE - United States Air Force Europe, Ramstein AB, GE
USAFA - United States Air Force Academy, Colorado Springs, CO

SSG - Standard Systems Group, Maxwell AFB-Gunter Annex, AL

## IDENTIFICATION CODES

Code "A" - Line items of material which have been approved for Air Force service use.

Code "B" - Line items of material that have not been approved for Service use

OBAN - Operating Budget Account Number, 2-digit code for unit allocated funds

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 1:

821800 / Passenger Carrying Vehicles

Passenger Carrying Vehicles

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |         |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|---------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 9.209            | 16.440            | 15.651           | 3.855            | 19.506         | 12.997          | 17.573         | 18.128  | 18.709  | -        | 112.562 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 9.209            | 16.440            | 15.651           | 3.855            | 19.506         | 12.997          | 17.573         | 18.128  | 18.709  | -        | 112.562 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 9.209            | 16.440            | 15.651           | 3.855            | 19.506         | 12.997          | 17.573         | 18.128  | 18.709  | -        | 112.562 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | - [      | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |

## **Description:**

FY17 funding totals include \$2.003M appropriated for Overseas Contingency Operations.

Passenger Carrying Vehicles includes the procurement of sedans, station wagons, law enforcement sedans, ambulances and buses. These vehicles are general in nature, but they fulfill unique and distinct needs commensurate with their design.

Sedans are available in compact, mid-size, and large, and are used to support a variety of functions and missions at all levels of the Air Force. A portion of these sedans is dedicated for use by the Office of Special Investigations (OSI) and a portion is procured as chase cars used to support U-2 aircraft operations.

Station wagons are mid-sized vehicles which are primarily used to transport personnel and light cargo. They are mostly used in overseas locations and some high security areas located near missile installations. They are also used in the maintenance and flying operation areas to support aircraft sortic generation.

Law Enforcement Sedans (LE Sedans) come equipped with a heavy-duty component package for law enforcement and security missions. Security forces personnel use this type of vehicle for emergency response, traffic control, patrol duties, and base security operations.

Ambulances include both bus ambulances and modular ambulances that are used for medical evacuation operations. The bus ambulance is a 44 passenger bus converted to accommodate massive patient transport for medical emergency situations and humanitarian/disaster relief operations. The modular models are standard commercial ambulances that are available in 4x2 and 4x4 configurations. They are used for the movement of patients under field conditions, aircraft crash rescue operations, and routine transportation of patients to and from medical facilities.

Buses include a variety of commercial vehicles that support a broad range of mass transit requirements. Bus sizes range from the 16 passenger shuttle bus to the 52 passenger bus. These vehicles support Air Education and Training Command (AETC) training units, Air Force band organizations, protocol offices, and several other missions.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Page 1 of 2

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 1:

821800 / Passenger Carrying Vehicles

Passenger Carrying Vehicles

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Funding for this exhibit contained in PEs: 0202834F, 0207142F, 0207597F, 0305202F, 0502834F, 0502844F, 0702831F,0804741F

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 163     | 305     | 197             | 27             | 224              | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 9.093   | 21.096  | 15.357          | 3.855          | 19.212           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG                   | Quantity                   | 1       | 10      | 5               | 0              | 5                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.116   | 0.221   | 0.190           | 0.000          | 0.190            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 0       | 4       | 4               | 0              | 4                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.123   | 0.104           | 0.000          | 0.104            | 0.000   | 0.000   | 0.000   | 0.000   |
|                        | Quantity                   | 164     | 319     | 206             | 27             | 233              | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 9.209   | 21.440  | 15.651          | 3.855          | 19.506           | 0.000   | 0.000   | 0.000   | 0.000   |

#### Justification:

FY18 procurement dollars in the amount of \$15.651M will procure, but not be limited to, 206 vehicles in support of installation and unit mission requirements for Air Force personnel.

FY18 OCO dollars in the amount of \$3.855M will procure, but is not limited to, 27 vehicles in support of Overseas Contingency Operations.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo

and Utility Vehicles

822230 / Medium Tactical Vehicle

P-1 Line Item Number / Title:

ID Code (A=Service Ready), B=Not Service Ready): A Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

| Ellic Relli MBAI /MAIO COde: N// (            |                |                  |                    |                  |                  |                |                 |                |         |         |          |         |
|---|----------------|------------------|--------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|---------|
|   | Prior          |                  |                    | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |         |
| Resource Summary                              | Years          | FY 2016          | FY 2017            | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -              | 58.160           | 33.878             | 54.607           | 0.000            | 54.607         | 37.514          | 35.324         | 36.905  | 37.844  | -        | 294.232 |
| Less PY Advance Procurement (\$ in Millions)  | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -              | 58.160           | 33.878             | 54.607           | 0.000            | 54.607         | 37.514          | 35.324         | 36.905  | 37.844  | -        | 294.232 |
| Plus CY Advance Procurement (\$ in Millions)  | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -              | 58.160           | 33.878             | 54.607           | 0.000            | 54.607         | 37.514          | 35.324         | 36.905  | 37.844  | -        | 294.232 |
| (The following                                | g Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) |         |         | ĺ        |         |
| Initial Spares (\$ in Millions)               | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -       |

# **Description:**

FY17 funding totals include \$9.066M appropriated for Overseas Contingency Operations.

In FY16, \$17.884M was used for Rapid Acquisition Authority for the Counter-Small UAS JEON.

The Family of Medium Tactical Vehicles (FMTV) has the capability to operate in austere and adverse terrain. These important tactical assets are used by Combat Communication Units, Air Support Operation Squadrons (ASOS), Explosive Ordinance Disposal units (EOD), and other tactical direct mission support units throughout the Air Force. FMTVs are a class of M-Series Vehicles.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for the exhibit contained in PEs 0202834F, 0502834F, 0502844F, 0702831F, 0802834F.

|        | Secondary Distribution     | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|--------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF     | Quantity                   | 272     | 219     | 307             | 0              | 307              | 0       | 0       | 0       | 0       |
|        | Total Obligation Authority | 57.413  | 30.683  | 51.880          | 0.000          | 51.880           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG   | Quantity                   | 18      | 12      | 8               | 0              | 8                | 0       | 0       | 0       | 0       |
|        | Total Obligation Authority | 0.672   | 1.980   | 1.698           | 0.000          | 1.698            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR    | Quantity                   | 2       | 7       | 8               | 0              | 8                | 0       | 0       | 0       | 0       |
|        | Total Obligation Authority | 0.075   | 1.215   | 1.029           | 0.000          | 1.029            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total: | Quantity                   | 292     | 238     | 323             | 0              | 323              | 0       | 0       | 0       | 0       |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo | 822230 / Medium Tactical Vehicle

and Utility Vehicles

P-1 Line Item Number / Title:

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|       |                   |                            |         |         | FY 2018 | FY 2018 | FY 2018 |         |         |         |         |
|-------|-------------------|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       | Secondary         | / Distribution             | FY 2016 | FY 2017 | Base    | oco     | Total   | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
| Secon | dary Distribution | Total Obligation Authority | 58.160  | 33.878  | 54.607  | 0.000   | 54.607  | 0.000   | 0.000   | 0.000   | 0.000   |

LI 822230 - Medium Tactical Vehicle Air Force

| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force | <b>Date</b> : May 2017 |
|---|------------------------|
|---|------------------------|

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo 822230 / Medium Tactical Vehicle

and Utility Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Medium Tactical Vehicle        |             |          |                       | - / -                                    | - / 58.160                               | - / 33.878                               | - / 54.607                               | - / 0.000                                | - / 54.607                               |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 58.160                               | - / 33.878                               | - / 54.607                               | - / 0.000                                | - / 54.607                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 procurement dollars in the amount of \$54.607M will procure, but is not limited to, 323 vehicles in support of the installation and unit mission requirements for Air Force personnel.

**UNCLASSIFIED** LI 822230 - Medium Tactical Vehicle Page 3 of 7

P-1 Line #2

**Volume 1 - 5** 

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 02 / 2

P-1 Line Item Number / Title:

822230 / Medium Tactical Vehicle

Medium Tactical Vehicle

| 3080F / 02 / 2   |          |                       |           |               |                         |           | 0             | 22230 1                 | Medium     | Tactica       | venicie                 | ;          |               |                         | IVI       | edium T       | acticai                 | verlicie   |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|
|  |          |                       | Р         | rior Years    | s                       |           | FY 2016       |                         |            | FY 2017       |                         | FY         | 2018 Bas      | e                       | FY        | 2018 OC       | 0                       | FY         | 2018 Tot      | al                      |
| Item Number /<br>Title [DODIC]                                     | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Incategorized  |          |                       |           |               |                         |           |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                         |
| TRK, CGO, MTV,<br>M1083A1P2, W/<br>OUT WINCH<br>(2320-01-549-8610) | Α        |                       | -         | -             | -                       | -         | -             | -                       | 202,000.00 | 1             | 0.202                   | 274,658.00 | 23            | 6.317                   | -         | -             | -                       | 274,658.00 | 23            | 6.3                     |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |            | 1             | 0.202                   |            | 21            | 5.768                   |           | -             | -                       |            | 21            | 5.7                     |
| AFNG   |          |                       |           | -             | -                       |           | -             | -                       |            | -             | -                       |            | 2             | 0.549                   |           | -             | -                       |            | 2             | 0.5                     |
| TRK, CGO, LMTV,<br>M1078A1P2, W/<br>OUT WINCH<br>(2320-01-549-8577 | Α        |                       | -         | -             | -                       | -         | -             | -                       | 145,000.00 | 4             | 0.580                   | 175,055.00 | 107           | 18.731                  | -         | -             | -                       | 175,055.00 | 107           | 18.7                    |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |            | 4             | 0.580                   |            | 105           | 18.381                  |           | -             | -                       |            | 105           | 18.3                    |
| AFNG   |          |                       |           | -             | -                       |           | -             | -                       |            | -             | -                       |            | 2             | 0.350                   |           | -             | -                       |            | 2             | 0.3                     |
| TRK TRACTOR,<br>M1070<br>(2320-01-318-9902)                        | Α        |                       | -         | -             | -                       | -         | -             | -                       | 396,000.00 | 1             | 0.396                   | 399,594.00 | 1             | 0.400                   | -         | -             | -                       | 399,594.00 | 1             | 0.4                     |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |            | 1             | 0.396                   |            | 1             | 0.400                   |           | -             | -                       |            | 1             | 0.4                     |
| TRK CUCV CGO<br>(2320-01-123-2671)                                 | Α        |                       | -         |               | -                       | -         | -             | -                       | 34,166.00  | 55            | 1.879                   | -          | -             | -                       | -         | -             | -                       | -          | -             |                         |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |            | •             |                         | ,          |               |                         |           | ,             |                         |            | ,             |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |            | 55            | 1.879                   |            | -             | -                       |           | -             | -                       |            | -             |                         |
| TRK CGO 6X6<br>(2320-01-354-3385)                                  | Α        |                       | -         | -             | -                       | -         | -             | -                       | 227,534.20 | 50            | 11.377                  | -          | -             | -                       | -         | -             | -                       | -          | -             |                         |
| Secondary Distribution   |          |                       |           |               | ļ.                      |           |               |                         |            |               |                         | Į.         |               |                         |           | l             |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |            | 48            | 10.922                  |            | -             | -                       |           | -             | -                       |            | -             |                         |
| AFNG   |          |                       |           | -             | -                       |           | -             | -                       |            | 2             | 0.455                   |            | -             | -                       |           | -             | -                       |            | -             |                         |
| TRK CGO 6X6<br>(2320-01-354-3386)<br>(4)                           | Α        |                       | -         | -             | -                       | -         | -             | -                       | 271,800.00 | 12            | 3.262                   | -          | -             | -                       | -         | -             | -                       | -          | -             |                         |
| Secondary Distribution   |          |                       | 1         |               |                         | 1         |               |                         |            |               |                         | ļ          |               |                         |           |               |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |           | _             | -                       |            | 9             | 2.446                   |            | -             | -                       |           | -             | -                       |            | -             |                         |
| AFNG   |          |                       |           | -             | -                       |           | -             | -                       |            | 3             | 0.815                   |            | -             | -                       |           | -             | -                       |            | -             |                         |
| TRUCK, DUMP<br>(2320-01-552-7787)                                  | Α        |                       | -         | -             | -                       | -         | -             | -                       | 269,000.00 | 20            | 5.380                   | 450,599.00 | 16            | 7.210                   | -         | -             | -                       | 450,599.00 | 16            | 7.2                     |

LI 822230 - Medium Tactical Vehicle Air Force

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 02 / 2

P-1 Line Item Number / Title:
822230 / Medium Tactical Vehicle

Aggregated Items Title:
Medium Tactical Vehicle

| 180F / UZ / Z   |          |                       |           |               |                         |            |               |                         | ivieaium   | raotioa       | 1 10111010              |            |               |                         | 141       | ealum 1       | aotioai                 | V 0111010  |               |                      |
|---|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|----------------------|
|   |          |                       | P         | rior Years    | 5                       |            | FY 2016       |                         |            | FY 2017       |                         | FY         | ′ 2018 Bas    | e                       | FY        | 2018 OC       | 0                       | FY         | 2018 Tot      | al                   |
| Item Number /<br>Title [DODIC]                                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Tota<br>Cos<br>(\$ M |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 20            | 5.380                   |            | 16            | 7.210                   |           | -             | -                       |            | 16            | 7                    |
| TRUCK DUMP<br>(2320-01-354-4529)                                  | Α        |                       | -         | -             | -                       | -          | -             | -                       | 400,500.00 | 2             | 0.801                   | -          | -             | -                       | -         | -             | -                       | -          | -             |                      |
| Secondary Distribution  |          |                       |           | ,             |                         |            |               |                         |            | Į.            |                         | ,          |               |                         |           |               |                         |            |               |                      |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 2             | 0.801                   |            | -             | -                       |           | -             | -                       |            | -             |                      |
| TRK, WRECKER,<br>M1089A1P2<br>W/WINCH<br>(2320-01-552-7762)       | A        |                       | -         | -             | -                       | 428,600.00 | 118           | 50.575                  | 429,000.00 | 11            | 4.719                   | 449,680.00 | 15            | 6.745                   | -         | -             | -                       | 449,680.00 | 15            |                      |
| Secondary Distribution  |          |                       |           |               |                         |            | '             |                         |            |               |                         |            | ,             |                         |           | ,             |                         |            |               |                      |
| AF  |          |                       |           | -             | -                       |            | 118           | 50.575                  |            | 11            | 4.719                   |            | 15            | 6.745                   |           | -             | -                       |            | 15            |                      |
| RK WRECKER<br>2320-01-354-4528)                                   | Α        |                       | -         | -             | -                       | -          | -             | -                       | 665,000.00 | 2             | 1.330                   | 680,547.00 | 8             | 5.444                   | -         | -             | -                       | 680,547.00 | 8             |                      |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                      |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.665                   |            | 7             | 4.764                   |           | -             | -                       |            | 7             |                      |
| AFNG  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.665                   |            | 1             | 0.681                   |           | -             | -                       |            | 1             |                      |
| TRK, CGO, MTV,<br>M1078A1P2, W/<br>DUT WINCH<br>2320-01-549-8611) | Α        |                       | -         | -             | -                       | -          | -             | -                       | 173,500.00 | 7             | 1.215                   | 175,450.00 | 17            | 2.983                   | -         | -             | -                       | 175,450.00 | 17            |                      |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                      |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | -             | -                       |            | 12            | 2.105                   |           | -             | -                       |            | 12            |                      |
| AFR   |          |                       |           | -             | -                       |            | -             | -                       |            | 7             | 1.215                   |            | 5             | 0.877                   |           | -             | -                       |            | 5             |                      |
| LR TK WTR,<br>1149A1<br>2330-00-060-6511)                         | A        |                       | -         | -             | -                       | 37,341.00  | 150           | 5.601                   | 38,000.00  | 13            | 0.494                   | 40,017.00  | 45            | 1.801                   | -         | -             | -                       | 40,017.00  | 45            |                      |
| econdary Distribution   |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                      |
| AF  |          |                       |           | -             | -                       |            | 130           | 4.854                   |            | 13            | 0.494                   |            | 45            | 1.801                   |           | -             | -                       |            | 45            |                      |
| AFNG  |          |                       |           | -             | -                       |            | 18            | 0.672                   |            | -             | -                       |            | -             | -                       |           | -             | -                       |            | -             |                      |
| AFR   | Ш        |                       |           | -             | -                       |            | 2             | 0.075                   |            | -             | -                       |            | -             | -                       |           | -             | -                       |            | -             |                      |
| LR, ISO<br>ONTAINER M872<br>330-01-142-1385)                      | Α        |                       | -         | -             | -                       | -          | -             | -                       | 70,500.00  | 10            | 0.705                   | 71,280.00  | 20            | 1.426                   | -         | -             | -                       | 71,280.00  | 20            |                      |
| econdary Distribution   |          |                       |           |               |                         | ,          |               |                         |            |               |                         |            |               |                         |           |               |                         |            |               |                      |
| AF  | Ш        |                       |           | -             | -                       |            | -             | -                       |            | 10            | 0.705                   |            | 18            | 1.283                   |           | -             | -                       |            | 18            |                      |
| AFR   | Ш        |                       |           | -             | -                       |            | -             | -                       |            | -             | -                       |            | 2             | 0.143                   |           | -             | -                       |            | 2             |                      |
| LR, 5T<br>LATBED, M843<br>2330-00-210-8935)                       | Α        |                       | -         | -             | -                       | -          | -             | -                       | 10,100.00  | 26            | 0.263                   | 12,423.00  | 4             | 0.050                   | -         | -             | -                       | 12,423.00  | 4             |                      |

LI 822230 - Medium Tactical Vehicle Air Force

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 02 / 2 822

822230 / Medium Tactical Vehicle

**Aggregated Items Title:**Medium Tactical Vehicle

| 0001 7 02 7 2                                     |    |                       |           |                      |                         |           | •                    |                         | wicaiaiii |               |                         | •         |                      |                         | 1         | ou.u                 | aotioai                 |           |               |              |
|---|----|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|--------------|
|   |    |                       | F         | Prior Year           | s                       |           | FY 2016              |                         |           | FY 2017       |                         | FY        | 2018 Ba              | se                      | FY        | / 2018 OC            | :0                      | FY        | 2018 Tot      | al           |
| Item Number /<br>Title [DODIC]                    | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Tota<br>Cost |
| Secondary Distribution                            |    |                       |           |                      |                         |           |                      |                         |           | l             |                         |           |                      |                         |           |                      |                         |           |               |              |
| AF  |    |                       |           | -                    | -                       |           | -                    | -                       |           | 26            | 0.263                   |           | 2                    | 0.025                   |           | -                    | -                       |           | 2             | 0.           |
| AFNG  |    |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 2                    | 0.025                   |           | -                    | -                       |           | 2             | 0.           |
| TLR, 2.5T CHS, M200<br>(2330-00-540-3950)         | Α  |                       | -         | -                    | -                       | 18,646.00 | 2                    | 0.037                   | 7,500.00  | 10            | 0.075                   | 8,810.00  | 17                   | 0.150                   | -         | -                    | -                       | 8,810.00  | 17            | 0.           |
| Secondary Distribution                            |    |                       |           |                      |                         |           |                      |                         | •         |               |                         |           |                      |                         | ,         |                      |                         |           |               |              |
| AF  |    |                       |           | -                    | -                       |           | 2                    | 0.037                   |           | 4             | 0.030                   |           | 16                   | 0.141                   |           | -                    | -                       |           | 16            | 0.           |
| AFNG  |    |                       |           | -                    | -                       |           | -                    | -                       |           | 6             | 0.045                   |           | -                    | -                       |           | -                    | -                       |           | -             |              |
| AFR   |    |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 1                    | 0.009                   |           | -                    | -                       |           | 1             | 0.           |
| DOLLY SET<br>(2330-01-378-9997)                   | Α  |                       | -         | -                    | -                       | 88,489.00 | 22                   | 1.947                   | 92,000.00 | 13            | 1.196                   | 93,660.00 | 17                   | 1.592                   | -         | -                    | -                       | 93,660.00 | 17            | 1.           |
| Secondary Distribution                            |    |                       | '         |                      |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                      |                         |           | ,             |              |
| AF  |    |                       |           | -                    | -                       |           | 22                   | 1.947                   |           | 13            | 1.196                   |           | 16                   | 1.499                   |           | -                    | -                       |           | 16            | 1.           |
| AFNG  |    |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 1                    | 0.094                   |           | -                    | -                       |           | 1             | 0.           |
| M871, TRLR ISO<br>CONTAINER<br>(2330-01-226-0701) | Α  |                       | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | 53,254.00 | 33                   | 1.757                   | -         | -                    | -                       | 53,254.00 | 33            | 1.           |
| Secondary Distribution                            |    |                       |           |                      |                         |           |                      |                         |           | ·             |                         |           |                      |                         |           |                      |                         |           |               |              |
| AF  |    |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 33                   | 1.757                   |           | -                    | -                       |           | 33            | 1.           |
| PMA OTHER<br>GOVERNMENT<br>COSTS                  | Α  |                       | -         | -                    | -                       | -         | -                    | -                       | 5,000.00  | 1             | 0.005                   | -         | -                    | 0.002                   | -         | -                    | 0.000                   | -         | -             | 0.           |
| Secondary Distribution                            |    |                       |           |                      |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |              |
| AF  |    |                       |           | -                    | -                       |           | -                    | -                       |           | 1             | 0.005                   |           | -                    | 0.002                   |           | -                    | 0.000                   |           | -             | 0.           |
| ubtotal: Uncategorized                            |    |                       | -         | -                    | -                       | -         | -                    | 58.160                  | -         | -             | 33.878                  | -         | -                    | 54.607                  | -         | -                    | 0.000                   | -         | -             | 54.          |
| otal  |    |                       | -         | -                    | -                       | -         | -                    | 58.160                  | -         | -             | 33.878                  | -         | -                    | 54.607                  | _         | -                    | 0.000                   | -         | -             | 54.0         |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

## Remarks:

Based on AF Mission changes and/or AF Mission priorities, NSNs and/or quantities may change during year of execution.

Unit costs and quantities for FY18 are subject to change.

#### PMA Justification:

-- PROGRAM MANAGEMENT ADMINISTRATION (PMA): PMA supports the operation of the program office in its management and oversight role via travel, procurement of supplies and Advisory and administrative Services (A&AS).

In FY16, \$17.884M was used for Rapid Acquisition Authority for the Counter-Small UAS JEON.

#### Footnotes

- (1) Quantities may change upon release of the Tactical Wheeled Vehicle Strategy.
- (2) FY17 4 EA OCO FUNDS \$0.137M
- (3) FY17 38 EA OCO FUNDS \$8.645

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| Appropriation / Budget Activity / Budget Sub Activity:  3080F / 02 / 2  P-1 Line Item Number / Title: 822230 / Medium Tactical Vehicle  Aggregated Items Title: Medium Tactical Vehicle  | Exhibit P-40a, Budget Item Justification For Aggregated                          | Items: FY 2018 Air Force | <b>Date</b> : May 2017 |
|--|--|--------------------------|------------------------|
| (4) FY17 - 1 EA OCO FUNDS \$0.272M   |  |                          | 00 0                   |
| <ul> <li>(5) Quantities may change upon release of the Tactical Wheeled Vehicle Strategy.</li> <li>(6) Quantities may change upon release of the Tactical Wheeled Vehicle Strategy.</li> <li>(7) FY17 - 1 EA OCO FUNDS \$0.010M</li> </ul> | (6) Quantities may change upon release of the Tactical Wheeled Vehicle Strategy. |                          |                        |



**Date:** May 2017 Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo

822910 / Cap Vehicles

and Utility Vehicles

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior         |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |       |
|--|---------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|-------|
| Resource Summary                               | Years         | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total |
| Procurement Quantity (Units in Each)           | 59            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | 59    |
| Gross/Weapon System Cost (\$ in Millions)      | 1.692         | 1.700            | 0.984             | 1.011            | 0.000            | 1.011          | 1.029           | 1.048         | 1.068   | 1.087   | -        | 9.619 |
| Less PY Advance Procurement (\$ in Millions)   | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Net Procurement (P-1) (\$ in Millions)         | 1.692         | 1.700            | 0.984             | 1.011            | 0.000            | 1.011          | 1.029           | 1.048         | 1.068   | 1.087   | -        | 9.619 |
| Plus CY Advance Procurement (\$ in Millions)   | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Total Obligation Authority (\$ in Millions)    | 1.692         | 1.700            | 0.984             | 1.011            | 0.000            | 1.011          | 1.029           | 1.048         | 1.068   | 1.087   | -        | 9.619 |
| (The following                                 | Resource Sumi | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) | •       |         | <u>'</u> |       |
| Initial Spares (\$ in Millions)                | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Flyaway Unit Cost (\$ in Millions)             | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | 0.029         | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | 0.163 |

## Description:

The Civil Air Patrol (CAP) is a Congressionally chartered non-profit corporation that serves as the Auxiliary of the Air Force. CAP uses federally provided resources to provide assistance requested by the DoD, federal, state or local government authorities and non-governmental organizations (NGOs) to perform emergency or non-emergency public purpose missions and activities.

Pursuant to US Code (Title 10 & 36) the purpose of CAP Corporation is to encourage and aid citizens of the US in contributing their efforts, services, and resources in developing aviation and in maintaining air supremacy; and to encourage and develop, by example, the voluntary contribution of private citizens to the public welfare.

Vehicle procurements enable the Civil Air Patrol (CAP) to provide rapid deployment of emergency essential ground teams who are capable of providing critical communications and humanitarian support during national emergencies and disasters.

CAP's procurement processes/standards are described in Department of Defense Grant & Agreement Regulations.

Program element associated with this P-1 Line is: 0901223F

#### Justification:

FY18 funding procures, but is not limited to, 31 vehicles in support of CAP Emergency Services. Cadet and Aerospace Education programs that encourage and develop the voluntary contribution of private citizens to the public welfare.

Vehicle type and quantities may change in execution year due to market availability, cost changes, mission requirements, additional funding, and needs of the organization. CAP generally receives a mark-up in execution year funds from Congress.

CAP provides transportation for ground teams who support 90% of the Air Force's search and rescue (SAR) missions in accordance with the National SAR Plan and disaster relief activities. Vehicles also provide transportation for over 24,000 CAP cadets to support execution of the Aerospace Education and Cadet Program missions as directed by 36 U.S.C Section 403, 10 U.S.C. Section 9442.

AF central procurement processes are not applicable.

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P-1 Line #3

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| Exhibit P-40, Budget Line Item Justification  | : FY 2018 Air Force                                      |   | <b>Date</b> : May 2017              |
|---|--|---|-------------------------------------|
| Appropriation / Budget Activity / Budget Su<br>3080F: Other Procurement, Air Force / BA 02:<br>and Utility Vehicles | <b>b Activity:</b><br>Vehicular Equipment / BSA 2: Cargo | <b>P-1 Line Item No</b> 822910 / Cap Ve |                                     |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It                           | ems: N/A                                | Other Related Program Elements: N/A |
| Line Item MDAP/MAIS Code: N/A   |  |   |                                     |
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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo

822990 / Cargo and Utility Vehicles

and Utility Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|   | Prior          |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
|---|----------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| <b>Resource Summary</b>                       | Years          | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -              | 12.483           | 134.455           | 28.670           | 1.882            | 30.552         | 8.685           | 23.709        | 23.253  | 24.209  | -        | 257.346 |
| Less PY Advance Procurement (\$ in Millions)  | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -              | 12.483           | 134.455           | 28.670           | 1.882            | 30.552         | 8.685           | 23.709        | 23.253  | 24.209  | -        | 257.346 |
| Plus CY Advance Procurement (\$ in Millions)  | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -              | 12.483           | 134.455           | 28.670           | 1.882            | 30.552         | 8.685           | 23.709        | 23.253  | 24.209  | -        | 257.346 |
| (The following                                | g Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)               | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |

## **Description:**

FY17 funding totals include \$12.264M appropriated for Overseas Contingency Operations.

This vehicle group consists of pickup trucks, trailers, semi-trailers, trucks, vans, utility trucks, maintenance and facility vehicles essential to base and flying operations. Assets are critical to the Air Force mission and are essential to flight line operations (aircraft maintenance), depot maintenance, component routing to depot back shops and airfield maintenance, and Air Base Civil Engineers performing base housing maintenance and repairs. These items are critical across the spectrum of functional users throughout the Air Force and provide multi-purpose capabilities. These vehicles also support mission needs for light to heavy cargo transport, as well as transportation for air/flight crew personnel. Cargo utility vehicles also provide heavy cargo movement for civil engineering and construction projects. Without the procurement of these replacement vehicles, the Air Force will not have the ability to support broad spectrum Air Force operations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PEs: 0202834F,0207597F, 0208028F, 0305114F, 0401221F, 0502834F, 0502844F, 0702831F, 1203915F.

|        | Secondary Distribution            | FY 2016  | FY 2017  | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019  | FY 2020  | FY 2021   | FY 2022  |
|--------|-----------------------------------|----------|----------|-----------------|----------------|------------------|----------|----------|-----------|----------|
|        | Decondary Distribution            | 1 1 2010 | 1 1 2017 | Dase            | 000            | iotai            | 1 1 2013 | 1 1 2020 | 1 1 202 1 | 1 1 2022 |
| AF     | Quantity                          | 283      | 3,731    | 546             | 52             | 598              | 0        | 0        | 0         | 0        |
|        | <b>Total Obligation Authority</b> | 10.756   | 131.128  | 19.853          | 1.882          | 21.734           | 0.000    | 0.000    | 0.000     | 0.000    |
| AFNG   | Quantity                          | 4        | 8        | 174             | 0              | 174              | 0        | 0        | 0         | 0        |
|        | <b>Total Obligation Authority</b> | 0.204    | 0.281    | 6.241           | 0.000          | 6.241            | 0.000    | 0.000    | 0.000     | 0.000    |
| AFR    | Quantity                          | 51       | 83       | 39              | 0              | 39               | 0        | 0        | 0         | 0        |
|        | Total Obligation Authority        | 1.523    | 3.046    | 2.576           | 0.000          | 2.576            | 0.000    | 0.000    | 0.000     | 0.000    |
| Total: | Quantity                          | 338      | 3,822    | 759             | 52             | 811              | 0        | 0        | 0         | 0        |

LI 822990 - Cargo and Utility Vehicles
Air Force

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P-1 Line #4

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo | 822990 / Cargo and Utility Vehicles

and Utility Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                        | ,                          |         |         | FY 2018 | FY 2018 | FY 2018 |         |         |         |         |
|------------------------|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Secondary              | y Distribution             | FY 2016 | FY 2017 | Base    | осо     | Total   | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
| Secondary Distribution | Total Obligation Authority | 12.483  | 134.455 | 28.670  | 1.882   | 30.552  | 0.000   | 0.000   | 0.000   | 0.000   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo and Utility Vehicles

822990 / Cargo and Utility Vehicles

P-1 Line Item Number / Title:

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Cargo and Utility Vehicles     |             |          |                       | - / -                                    | - / 12.483                               | - / 134.455                              | - / 28.670                               | - / 1.882                                | - / 30.552                               |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 12.483                               | - / 134.455                              | - / 28.670                               | - / 1.882                                | - / 30.552                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 procurement dollars in the amount of \$28.670M will procure, but is not limited, to 759 vehicles in support of installation and unit mission requirements for Air Force personnel.

FY18 OCO dollars in the amount of \$1.882M will procure, but is not limited to, 52 vehicles in support of Overseas Contingency Operations.

LI 822990 - Cargo and Utility Vehicles Air Force

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 02 / 2

P-1 Line Item Number / Title:

822990 / Cargo and Utility Vehicles

Aggregated Items Title:

Cargo and Utility Vehicles

| 000110212   |    |                       |           |               |                         |            |               |                         |            |               | / VEITICIE              |            |               |                         |            | a. 90 a       |                         | vernoles   |               |                         |
|---|----|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|
|   |    |                       | P         | rior Years    | S                       |            | FY 2016       |                         |            | FY 2017       |                         | FY         | 2018 Bas      | e                       | FY         | 2018 OC       | 0                       | FY         | 2018 Tot      | .al                     |
| Item Number /<br>Title [DODIC]                          | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ncategorized  |    |                       | ,         |               |                         | ,          | · · · · · ·   |                         |            |               |                         | ,          |               |                         |            | '             |                         | '          |               |                         |
| TRK 1/2 Crew<br>Cab 4x4 PU<br>(2320-01-484-6745)        | A  |                       | -         | -             | -                       | 27,890.00  | 10            | 0.279                   | 43,000.00  | 13            | 0.559                   | 28,000.00  | 69            | 1.932                   | -          | -             | -                       | 28,000.00  | 69            | 1.93                    |
| Secondary Distribution                                  |    |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |    |                       |           | -             | -                       |            | 10            | 0.279                   |            | 13            | 0.559                   |            | 46            | 1.288                   |            | -             | -                       |            | 46            | 1.28                    |
| AFNG  |    |                       |           | -             | -                       |            | -             | -                       |            | -             | -                       |            | 23            | 0.644                   |            | -             | -                       |            | 23            | 0.64                    |
| TRK PU 4DR<br>4X4 F450<br>(2320-01-501-6635)            | A  |                       | -         | -             | -                       | -          | -             | -                       | 50,622.00  | 15            | 0.759                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       |
| Secondary Distribution                                  |    |                       |           |               |                         |            | -             |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |    |                       |           | -             | -                       |            | -             | -                       |            | 15            | 0.759                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| TRK PU 4X4 3/4<br>REG CAB MIN8000<br>(2320-01-532-2772) | А  |                       | -         | -             | -                       | -          | -             | -                       | 26,750.00  | 19            | 0.508                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                                  |    |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |    |                       |           | -             | -                       |            | -             | -                       |            | 19            | 0.508                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| TRK UTILITY<br>4X4 4DOOR<br>(2320-01-338-6502)          | А  |                       | -         | -             | -                       | -          | -             | -                       | 29,500.00  | 15            | 0.443                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                                  |    |                       |           |               |                         | 1          |               |                         |            |               |                         |            |               |                         |            | ļ             |                         | 1          |               |                         |
| AF  |    |                       |           | -             | -                       |            | -             | -                       |            | 11            | 0.325                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| AFNG  |    |                       |           | -             | -                       |            | -             | -                       |            | 4             | 0.118                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| TRK CGO CMPT<br>4X4 3500G<br>(2320-01-087-8223)         | А  |                       | -         | -             | -                       | -          | -             | -                       | 22,000.00  | 15            | 0.330                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                                  |    |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            | ,             |                         |            |               |                         |
| AF  |    |                       |           | -             | -                       |            | -             | -                       |            | 15            | 0.330                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| PMA   | Α  |                       | -         | -             | -                       | -          | -             | -                       | 12,000.00  | 1             | 0.012                   | 5,800.00   | 1             | 0.006                   | -          | -             | -                       | 5,800.00   | 1             | 0.0                     |
| Secondary Distribution                                  |    |                       | ,         |               |                         |            | · ·           |                         |            |               |                         |            |               |                         |            | ,             |                         | '          |               |                         |
| AF  |    |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.012                   |            | 1             | 0.006                   |            | -             | -                       |            | 1             | 0.0                     |
| TRK TRAC 55<br>GVW 6X4 RH<br>(2320-01-058-5724)         | A  |                       | -         | -             | -                       | 106,910.00 | 2             | 0.214                   | 146,750.00 | 13            | 1.908                   | 138,500.00 | 12            | 1.662                   | 138,500.00 | 2             | 0.277                   | 138,500.00 | 14            | 1.9                     |
| Secondary Distribution                                  |    |                       |           |               |                         | •          |               |                         | •          | •             |                         |            |               |                         |            | ,             |                         |            |               |                         |
| AF  |    |                       |           | -             | -                       |            | 1             | 0.107                   |            | 13            | 1.908                   |            | 5             | 0.693                   |            | 2             | 0.277                   |            | 7             | 0.9                     |
| AFNG  |    |                       |           | -             | -                       |            | -             | -                       |            | -             | -                       |            | 7             | 0.970                   |            | -             | -                       |            | 7             | 0.9                     |
| AFR   |    |                       |           | -             | -                       |            | 1             | 0.107                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| 1T S&P 4X2<br>(2320-00-851-8481)                        | Α  |                       | -         | -             | -                       | 26,151.00  | 7             | 0.183                   | 30,000.00  | 138           | 4.140                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |

LI 822990 - Cargo and Utility Vehicles Air Force

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2 P-1 Line Item Number / Title: Aggregated Items Title:

822990 / Cargo and Litility Vehicles Cargo and Utility Vehicles

| 080F / 02 / 2   |          |                       |           |               |                         |            |               | ZZ330 I                 | Cargo a    |               | V CI IICI               |           |                      |                         |           |               |                         | Vehicles  |               |                      |
|---|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|----------------------|
|   |          |                       | P         | rior Year     | s                       |            | FY 2016       |                         |            | FY 2017       |                         | F۱        | / 2018 Bas           | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 Tot      | al                   |
| Item Number /<br>Title [DODIC]                        | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Tota<br>Cos<br>(\$ A |
| AF  |          |                       |           | -             | -                       |            | 5             | 0.131                   |            | 133           | 3.990                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFR   |          |                       |           | -             | -                       |            | 2             | 0.052                   |            | 5             | 0.150                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| Armored SUV<br>(2320-01-533-0826)                     | А        |                       | -         | -             | -                       | 105,000.00 | 6             | 0.630                   | -          | -             | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                                |          |                       |           |               |                         |            |               |                         |            |               |                         | I         |                      |                         |           |               |                         |           |               |                      |
| AF  |          |                       |           |               | _                       |            | 6             | 0.630                   |            | -             | _                       |           | -                    | _                       |           |               | _                       |           | -             |                      |
| 4X4 CREWCAB<br>UTILITY TRK<br>(2320-01-395-1368)      | A        |                       | -         | -             | -                       | -          | -             | -                       | 420,000.00 | 1             | 0.420                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                                |          |                       |           |               |                         |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.420                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| TRAILER TILT<br>DECK 6TON<br>(2330-01-657-2183)       | A        |                       | -         | -             | -                       | 22,186.00  | 1             | 0.022                   | 19,000.00  | 16            | 0.304                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                                |          |                       |           |               |                         |            |               |                         |            | <u> </u>      |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 16            | 0.304                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFR   |          |                       |           | -             | -                       |            | 1             | 0.022                   |            | -             | -                       |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| TRAILER VAN<br>CARGO 12TON<br>(2330-01-657-3336)      | А        |                       | -         | -             | -                       | 35,000.00  | 1             | 0.035                   | 35,586.00  | 35            | 1.246                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                                |          |                       |           |               |                         |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 35            | 1.246                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFR   |          |                       |           | -             | -                       |            | 1             | 0.035                   |            | -             | -                       |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| TRAILER 20T 40FT<br>W/COVER KIT<br>(2330-01-094-0007) | А        |                       | -         | -             | -                       | 25,000.00  | 5             | 0.125                   | 78,000.00  | 24            | 1.872                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                                |          |                       |           |               |                         |            |               |                         |            |               |                         | ı         |                      |                         |           |               |                         |           |               |                      |
| AF  |          |                       |           | -             | -                       |            | 4             | 0.100                   |            | 22            | 1.716                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFR   |          |                       |           | -             | -                       |            | 1             | 0.025                   |            | 2             | 0.156                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| TRAILER<br>LOWBED 35TON<br>(2330-01-051-6648)         | А        |                       | -         | -             | -                       | 22,500.00  | 2             | 0.045                   | 62,000.00  | 13            | 0.806                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                                |          |                       |           |               | ,                       |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF  |          |                       |           | -             | -                       |            | 2             | 0.045                   |            | 10            | 0.620                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFR   |          |                       |           | -             | -                       |            | -             | -                       |            | 3             | 0.186                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| TRAILER LOW-<br>BED 20TON 25FT<br>(2330-01-657-1333)  | А        |                       | -         | -             | -                       | 34,497.00  | 2             | 0.069                   | 39,000.00  | 54            | 2.106                   | 41,000.00 | 20                   | 0.820                   | -         | -             | -                       | 41,000.00 | 20            |                      |
| Secondary Distribution                                |          |                       |           |               |                         |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF  |          |                       |           | _             | _                       |            | 1             | 0.034                   |            | 54            | 2.106                   |           | 9                    | 0.369                   |           | _             |                         |           | 9             |                      |

LI 822990 - Cargo and Utility Vehicles Air Force

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P-1 Line #4

**Date:** May 2017

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2

P-1 Line Item Number / Title:

822990 / Cargo and Utility Vehicles

Aggregated Items Title: Cargo and Utility Vehicles

| 080F / 02 / 2                                      |          |                       |           |               |                         |            | 0             | 22990 I                 | Cargo a   | na Otility    | , venici                | 53        |               |                         | 00        | argo aric     | Utility                 | Vehicles  |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | Р         | rior Years    | \$                      |            | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 Tot      | tal                     |
| Item Number /<br>Title [DODIC]                     | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| AFNG   |          |                       |           | -             | -                       |            | -             | -                       |           | -             | -                       |           | 7             | 0.287                   |           | -             | -                       |           | 7             | 0.2                     |
| AFR  |          |                       |           | -             | -                       |            | 1             | 0.034                   |           | -             | -                       |           | 4             | 0.164                   |           | -             | -                       |           | 4             | 0.1                     |
| TRK CGO 4DR<br>4X4 TLR TWG<br>(2320-01-424-2760)   | Α        |                       | -         | -             | -                       | 30,512.00  | 2             | 0.061                   | 31,426.00 | 26            | 0.817                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                             |          |                       |           | ,             |                         |            | ,             |                         |           | '             |                         | '         | '             |                         | '         | '             |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |            | 1             | 0.031                   |           | 25            | 0.786                   |           | -             | -                       |           | -             | -                       |           | -             |                         |
| AFNG   |          |                       |           | -             | -                       |            | -             | -                       |           | 1             | 0.031                   |           | -             | -                       |           | -             | -                       |           | -             |                         |
| AFR  |          |                       |           | -             | -                       |            | 1             | 0.031                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| TRAILER,<br>38 FT. SEMI<br>(2330-01-381-9477)      | А        |                       | -         | -             | -                       | 33,765.00  | 83            | 2.802                   | 44,000.00 | 207           | 9.108                   | 45,000.00 | 21            | 0.945                   | -         | -             | -                       | 45,000.00 | 21            | 0.9                     |
| Secondary Distribution                             |          |                       |           |               |                         |            | ,             |                         |           | ,             |                         | ,         |               |                         |           | ,             |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |            | 83            | 2.802                   |           | 202           | 8.888                   |           | 18            | 0.810                   |           | -             | -                       |           | 18            | 3.0                     |
| AFNG   |          |                       |           | -             | -                       |            | -             | -                       |           | 3             | 0.132                   |           | 3             | 0.135                   |           | -             | -                       |           | 3             | 0.1                     |
| AFR  |          |                       |           | -             | -                       |            | -             | -                       |           | 2             | 0.088                   |           | -             | -                       |           | -             | -                       |           | -             |                         |
| TLR CBL REEL,<br>W/POLE 6TON<br>(2330-01-657-3338) | А        |                       | -         | -             | -                       | 23,689.00  | 1             | 0.024                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                             |          |                       |           |               |                         |            |               |                         |           | ļ             |                         |           |               |                         |           | ļ             |                         |           |               | ļ.                      |
| AFR  |          |                       |           | -             | -                       |            | 1             | 0.024                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| STLR VAN<br>30FT 12 TON<br>(2330-01-627-5975)      | А        |                       | -         | -             | -                       | 49,586.00  | 2             | 0.099                   | 54,258.00 | 2             | 0.109                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                             |          |                       |           | ,             |                         |            | ,             |                         | '         | ,             |                         | ,         |               |                         |           | ,             |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |            | 2             | 0.099                   |           | 2             | 0.109                   |           | -             | -                       |           | -             | -                       |           | -             |                         |
| TRK3/4T CREW<br>CAB 4X2 PU<br>(2320-00-450-1005)   | A        |                       | -         | -             | -                       | 37,446.00  | 1             | 0.037                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                             |          |                       |           |               |                         |            |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AFR  |          |                       |           | -             | -                       |            | 1             | 0.037                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| TRK TRAC 6X4<br>MLOX 64-72K<br>(2320-00-344-4397)  | A        |                       | -         | -             | -                       | 204,057.00 | 1             | 0.204                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                             |          |                       |           |               |                         |            |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |            | 1             | 0.204                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| TRK TRAC SPTR<br>4X2 32MG G<br>(2320-00-239-2944)  | A        |                       | -         | -             | -                       | 50,118.00  | 1             | 0.050                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                             |          |                       |           | ,             |                         |            |               |                         |           |               |                         |           | ,             |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | _             |                         |            | 1             | 0.050                   |           | -             |                         |           | _             |                         |           | _             |                         |           | _             |                         |

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P-1 Line #4

Volume 1 - 18

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 02 / 2

822990 / Cargo and Utility Vehicles

Aggregated Items Title:
Cargo and Utility Vehicles

| 080F / 02 / 2  |    |                       |           |                      |                         |           | U             | 223301                  | Cargo a   | na Otini      | / venicie               | 55        |               |                         |           | argo aric     | Utility                 | venicies  |                      |             |
|--|----|-----------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------|
|  |    |                       | P         | Prior Years          | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | FY        | 2018 OC       | 0                       | FY        | ′ 2018 Tot           | tal         |
| Item Number /<br>Title [DODIC]   | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Tota<br>Cos |
| TRAILER, FLAT BED,<br>45 FT. AIR RIDE<br>(2330-01-061-8609)<br>(2)     | А  |                       | -         | -                    | -                       | -         | -             | -                       | 41,000.00 | 3             | 0.123                   | 42,000.00 | 8             | 0.336                   | -         | -             | -                       | 42,000.00 | 8                    | 0           |
| Secondary Distribution   |    |                       | '         |                      |                         |           | '             |                         | '         |               |                         |           | '             |                         |           |               |                         | '         |                      |             |
| AF   |    |                       |           | -                    | -                       |           | -             | -                       |           | 3             | 0.123                   |           | 8             | 0.336                   |           | -             | -                       |           | 8                    | С           |
| TRAILER, 50<br>TON LOWBED<br>(2330-01-058-5911)                        | А  |                       | -         | -                    | -                       | 60,613.00 | 7             | 0.424                   | 67,945.00 | 12            | 0.815                   | -         | -             | -                       | -         | -             | -                       | -         | -                    |             |
| Secondary Distribution   |    |                       |           |                      | ,                       | •         |               |                         | •         | ,             |                         |           | ,             |                         |           |               |                         |           |                      |             |
| AF   |    |                       |           | -                    | -                       |           | 7             | 0.424                   |           | 12            | 0.815                   |           | -             | -                       |           | -             | -                       |           | -                    |             |
| TRAILER, LOWBED,<br>TILT DECK, 22 TON<br>(2330-01-657-3337)            | А  |                       | -         | -                    | -                       | 39,426.00 | 4             | 0.158                   | 40,608.00 | 34            | 1.381                   | -         | -             | -                       | -         | -             | -                       | -         | -                    |             |
| Secondary Distribution   |    |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |                      |             |
| AF   |    |                       |           | -                    | -                       |           | 3             | 0.118                   |           | 31            | 1.259                   |           | -             | -                       |           | -             | -                       |           | -                    |             |
| AFNG   |    |                       |           | -                    | -                       |           | 1             | 0.039                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -                    |             |
| AFR  |    |                       |           | -                    | -                       |           | -             | -                       |           | 3             | 0.122                   |           | -             | -                       |           | -             | -                       |           | -                    |             |
| TRUCK, PICKUP,<br>CREW CAB,<br>1/2T, 4X4<br>(2320-01-484-6748)         | A  |                       | -         | -                    | -                       | 25,645.00 | 8             | 0.205                   | 33,000.00 | 36            | 1.188                   | -         | -             | -                       | -         | -             | -                       | -         | -                    |             |
| Secondary Distribution   |    |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |                      |             |
| AF   |    |                       |           | -                    | -                       |           | 7             | 0.180                   |           | 36            | 1.188                   |           | -             | -                       |           | -             | -                       |           | -                    |             |
| AFR  |    |                       |           | -                    | -                       |           | 1             | 0.026                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -                    |             |
| TRUCK, PICKUP<br>CREW CAB<br>4X4, 3/4T CU<br>(2320-00-580-2955)<br>(3) | A  |                       | -         | -                    | -                       | 30,279.00 | 29            | 0.878                   | 34,000.00 | 258           | 8.772                   | 36,250.65 | 46            | 1.668                   | 36,250.00 | 4             | 0.145                   | 36,250.60 | 50                   |             |
| Secondary Distribution   |    |                       | 1         |                      | l.                      | 1         |               |                         | 1         |               |                         |           |               |                         |           |               |                         | 1         |                      |             |
| AF   |    |                       |           | -                    | -                       |           | 20            | 0.606                   |           | 250           | 8.500                   |           | 38            | 1.378                   |           | 4             | 0.145                   |           | 42                   |             |
| AFNG   |    |                       |           | -                    | -                       |           | 1             | 0.030                   |           | -             | -                       |           | 7             | 0.254                   |           | -             | -                       |           | 7                    |             |
| AFR  |    |                       |           | -                    | -                       |           | 8             | 0.242                   |           | 8             | 0.272                   |           | 1             | 0.036                   |           | -             | -                       |           | 1                    |             |
| TRUCK, PICKUP<br>CREW CAB<br>4X2, 3/4T CU<br>(2320-00-580-2954)<br>(4) | A  |                       | -         | -                    | -                       | 25,127.00 | 12            | 0.302                   | 31,000.00 | 292           | 9.052                   | 32,000.00 | 44            | 1.408                   | 32,000.00 | 4             | 0.128                   | 32,000.00 | 48                   |             |
| Secondary Distribution   |    |                       |           |                      | 1                       |           |               |                         |           |               |                         |           | 1             |                         |           |               |                         |           |                      |             |
| AF   |    |                       |           | -                    | -                       |           | 9             | 0.226                   |           | 289           | 8.959                   |           | 37            | 1.184                   |           | 4             | 0.128                   |           | 41                   |             |
| AFNG   |    |                       |           | _                    | -                       |           | 1             | 0.025                   |           | _             | _                       |           | 7             | 0.224                   |           | _             | _                       |           | 7                    |             |

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P-1 Line #4

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2

P-1 Line Item Number / Title:

822990 / Cargo and Utility Vehicles

Aggregated Items Title:
Cargo and Utility Vehicles

| 080F / 02 / 2   |          |                       |           |               |               |           | 0.            | 229901                  | Cargo a   | na Otility    | vernici                 | 35        |               |                         | U         | argo and      | Utility                 | /ehicles  |               |               |
|---|----------|-----------------------|-----------|---------------|---------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|---------------|
|   |          |                       | P         | rior Year     | s             |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | e                       | FY        | 2018 OC       | 0                       | FY        | 2018 Tot      | al            |
| Item Number /<br>Title [DODIC]                                      | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost |
| AFR   |          |                       |           | -             | -             |           | 2             | 0.050                   |           | 3             | 0.093                   |           | -             | -                       |           | -             | -                       |           | -             |               |
| TRUCK, STAKE<br>AND PLATFORM<br>4X2 10000GVW<br>(2320-01-250-7367)  | A        |                       | -         | -             | -             | 29,844.00 | 7             | 0.209                   | 34,950.00 | 144           | 5.033                   | 31,000.00 | 28            | 0.868                   | 31,000.00 | 1             | 0.031                   | 31,000.00 | 29            | 0.8           |
| Secondary Distribution  |          |                       |           |               |               |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| AF  |          |                       |           | -             | -             |           | 6             | 0.179                   |           | 144           | 5.033                   |           | 22            | 0.682                   |           | 1             | 0.031                   |           | 23            | 0.7           |
| AFNG  |          |                       |           | -             | -             |           | -             | -                       |           | -             | -                       |           | 6             | 0.186                   |           | -             | -                       |           | 6             | 0.1           |
| AFR   |          |                       |           | -             | -             |           | 1             | 0.030                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |               |
| TRUCK, CARRYALL<br>4X2 8 PAX<br>(2320-00-879-7662)<br>(5)           | A        |                       | -         | -             | -             | 25,727.00 | 7             | 0.180                   | 27,000.00 | 162           | 4.374                   | 27,850.00 | 32            | 0.891                   | 27,850.00 | 4             | 0.111                   | 27,850.00 | 36            | 1.0           |
| Secondary Distribution  | ,        |                       |           |               | ,             | `         |               |                         |           |               |                         |           |               |                         |           | •             |                         |           | ~             |               |
| AF  |          |                       |           | -             | -             |           | 6             | 0.154                   |           | 162           | 4.374                   |           | 28            | 0.780                   |           | 4             | 0.111                   |           | 32            | 0.0           |
| AFNG  |          |                       |           | -             | -             |           | -             | -                       |           | -             | -                       |           | 4             | 0.111                   |           | -             | -                       |           | 4             | 0.            |
| AFR   |          |                       |           | -             | -             |           | 1             | 0.026                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |               |
| TRUCK, CARRYALL<br>4X2 15 PAX<br>(2320-01-036-6569)                 | Α        |                       | -         | -             | -             | 27,659.00 | 8             | 0.221                   | 28,000.00 | 139           | 3.892                   | 29,000.00 | 16            | 0.464                   | 29,000.00 | 4             | 0.116                   | 29,000.00 | 20            | 0.8           |
| Secondary Distribution  | ,        |                       |           |               |               |           |               |                         |           |               |                         |           |               |                         |           | ,             |                         |           |               |               |
| AF  |          |                       |           | -             | -             |           | 7             | 0.194                   |           | 139           | 3.892                   |           | 13            | 0.377                   |           | 4             | 0.116                   |           | 17            | 0.            |
| AFNG  |          |                       |           | -             | -             |           | -             | -                       |           | -             | -                       |           | 3             | 0.087                   |           | -             | -                       |           | 3             | 0.0           |
| AFR   |          |                       |           | -             | -             |           | 1             | 0.028                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |               |
| TRUCK, CARRYALL<br>4X2 7 PAX<br>(2320-01-173-6113)                  | Α        |                       | -         | -             | -             | 21,649.00 | 2             | 0.043                   | 24,300.00 | 63            | 1.531                   | 27,000.00 | 21            | 0.567                   | 27,000.00 | 4             | 0.108                   | 27,000.00 | 25            | 0.0           |
| Secondary Distribution  | ,        |                       |           |               |               |           |               |                         |           |               |                         |           |               |                         |           | ,             |                         |           | ,             |               |
| AF  |          |                       |           | -             | -             |           | 1             | 0.022                   |           | 60            | 1.458                   |           | 18            | 0.486                   |           | 4             | 0.108                   |           | 22            | 0.            |
| AFNG  |          |                       |           | -             | -             |           | -             | -                       |           | -             | -                       |           | 3             | 0.081                   |           | -             | -                       |           | 3             | 0.0           |
| AFR   |          |                       |           | -             | -             |           | 1             | 0.022                   |           | 3             | 0.073                   |           | -             | -                       |           | -             | -                       |           | -             |               |
| TRUCK, PICKUP<br>4X4 1/2 T 4600<br>& 5799 GVW<br>(2320-00-811-6869) | A        |                       | -         | -             | -             | 22,562.00 | 9             | 0.203                   | 24,200.00 | 78            | 1.888                   | 26,464.00 | 28            | 0.741                   | 26,464.00 | 4             | 0.106                   | 26,464.00 | 32            | 0.            |
| Secondary Distribution  |          |                       |           |               |               |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| AF  |          |                       |           | -             | -             |           | 7             | 0.158                   |           | 75            | 1.815                   |           | 24            | 0.635                   |           | 4             | 0.106                   |           | 28            | 0.7           |
| AFNG  |          |                       |           | -             | -             |           | -             | -                       |           | -             | -                       |           | 4             | 0.106                   |           | -             | -                       |           | 4             | 0.            |
| AFR   |          |                       |           | -             | -             |           | 2             | 0.045                   |           | 3             | 0.073                   |           | -             | -                       |           | -             | -                       |           | -             |               |
| SUV, 4X4 COMPACT<br>4500 GVW<br>(2320-01-563-7478)                  | А        |                       | -         | -             | -             | -         | -             | -                       | 25,000.00 | 28            | 0.700                   | 27,000.00 | 20            | 0.540                   | 27,000.00 | 3             | 0.081                   | 27,000.00 | 23            | 0.6           |

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017 Aggregated Items Title:

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2

P-1 Line Item Number / Title:

|   |    |              | Prior Years |               |                         | FY 2016    |               |                         | FY 2017    |               |                         |            |               | ^                       | EV         | 2018 OC       |                         | FY 2018 Total |               |                         |
|---|----|--------------|-------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|---------------|---------------|-------------------------|
|   |    | MDAP/        | F           | nor rear      |                         |            | F1 2010       |                         |            | F1 2017       |                         | ГІ         | 2018 Bas      | _                       | ГІ         | 2010 00       |                         | г             | 2010 101      |                         |
| Item Number /<br>Title [DODIC]                                    | ID | MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Secondary Distribution  | ,  |              |             |               |                         | ,          |               |                         |            |               |                         | ·          |               |                         |            |               |                         |               | ·             |                         |
| AF  |    |              |             | -             | -                       |            | -             | -                       |            | 28            | 0.700                   |            | 20            | 0.540                   |            | 3             | 0.081                   |               | 23            | 0.6                     |
| VAN, MAINTENANCE<br>UTILITY DELIVERY<br>(2320-01-176-2223)<br>(6) | A  |              | -           | -             | -                       | 27,783.00  | 29            | 0.806                   | 37,000.00  | 379           | 14.023                  | 37,000.00  | 50            | 1.850                   | 37,000.00  | 3             | 0.111                   | 37,000.00     | 53            | 1.9                     |
| Secondary Distribution  | ,  |              |             |               |                         |            |               |                         |            |               |                         |            | •             |                         |            |               |                         |               | <u> </u>      |                         |
| AF  |    |              |             | -             | -                       |            | 22            | 0.611                   |            | 367           | 13.579                  |            | 35            | 1.295                   |            | 3             | 0.111                   |               | 38            | 1.4                     |
| AFNG  |    |              |             | -             | -                       |            | -             | -                       |            | -             | -                       |            | 15            | 0.555                   |            | -             | -                       |               | 15            | 0.5                     |
| AFR   |    |              |             | -             | -                       |            | 7             | 0.194                   |            | 12            | 0.444                   |            | -             | -                       |            | -             | -                       |               | -             |                         |
| TRUCK,<br>TRACTOR 44.5G<br>(2320-00-271-1432)<br>(7)              | A  |              | -           | -             | -                       | 125,410.00 | 18            | 2.257                   | 129,750.00 | 85            | 11.029                  | -          | -             | -                       | -          | -             | -                       | -             | -             |                         |
| Secondary Distribution  |    |              |             |               |                         |            |               |                         |            |               |                         | ·          |               |                         |            | ·             |                         |               |               |                         |
| AF  |    |              |             | -             | -                       |            | 17            | 2.132                   |            | 84            | 10.899                  |            | -             | -                       |            | -             | -                       |               | -             |                         |
| AFR   |    |              |             | -             | -                       |            | 1             | 0.125                   |            | 1             | 0.130                   |            | -             | -                       |            | -             | -                       |               | -             |                         |
| TRUCK, VAN<br>PANEL 4X2<br>(2320-01-013-2754)                     | A  |              | -           | -             | -                       | 21,936.00  | 12            | 0.263                   | 23,750.00  | 279           | 6.626                   | 23,750.00  | 33            | 0.784                   | 23,750.00  | 3             | 0.071                   | 23,750.00     | 36            | 0.8                     |
| Secondary Distribution  | 1  |              |             |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |               |               |                         |
| AF  |    |              |             | -             | -                       |            | 10            | 0.219                   |            | 273           | 6.484                   |            | 16            | 0.380                   |            | 3             | 0.071                   |               | 19            | 0.4                     |
| AFNG  |    |              |             | -             | -                       |            | -             | -                       |            | -             | -                       |            | 13            | 0.309                   |            | -             | -                       |               | 13            | 0.3                     |
| AFR   |    |              |             | -             | -                       |            | 2             | 0.044                   |            | 6             | 0.143                   |            | 4             | 0.095                   |            | -             | -                       |               | 4             | 0.0                     |
| TRUCK,<br>TRACTOR 39.5G<br>(2320-01-341-7627)                     | A  |              | -           | -             | -                       | 109,067.00 | 1             | 0.109                   | 130,585.00 | 26            | 3.395                   | 118,000.00 | 14            | 1.652                   | 118,000.00 | 1             | 0.118                   | 118,000.00    | 15            | 1.                      |
| Secondary Distribution  |    |              |             |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |               |               |                         |
| AF  |    |              |             | -             | -                       |            | -             | -                       |            | 26            | 3.395                   |            | 11            | 1.298                   |            | 1             | 0.118                   |               | 12            | 1.                      |
| AFNG  |    |              |             | -             | -                       |            | 1             | 0.109                   |            | -             | -                       |            | 3             | 0.354                   |            | -             | -                       |               | 3             | 0.                      |
| TRUCK, 1/2 T<br>REG CAB 4X2<br>(2320-00-540-1428)                 | A  |              | -           | -             | -                       | 20,177.00  | 21            | 0.424                   | 24,000.00  | 390           | 9.360                   | 24,000.00  | 73            | 1.752                   | 24,000.00  | 2             | 0.048                   | 24,000.00     | 75            | 1.                      |
| Secondary Distribution  |    |              |             |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |               |               |                         |
| AF  |    |              |             | -             | -                       |            | 17            | 0.343                   |            | 385           | 9.240                   |            | 43            | 1.032                   |            | 2             | 0.048                   |               | 45            | 1.                      |
| AFNG  |    |              |             | -             | -                       |            | -             | -                       |            | -             | -                       |            | 24            | 0.576                   |            | -             | -                       |               | 24            | 0.                      |
| AFR   |    |              |             | -             | -                       |            | 4             | 0.081                   |            | 5             | 0.120                   |            | 6             | 0.144                   |            | -             | -                       |               | 6             | 0.                      |
| 1/4 TON 4X4<br>EXT CAB P/U<br>(2320-01-500-9498)                  | А  |              | -           | -             | -                       | 31,641.00  | 1             | 0.032                   | -          | -             | -                       | 32,000.00  | 12            | 0.384                   | -          | -             | -                       | 32,000.00     | 12            | 0.                      |

LI 822990 - Cargo and Utility Vehicles Air Force

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

822990 / Cargo and Utility Vehicles

Aggregated Items Title:

| 3080F / 02 / 2  |          |                       |           |               |                         |           |               | 822990 / Cargo and Utility Vehicles |           |               |                         |           |               |                         |           |               |                         | Cargo and Utility Vehicles |               |               |  |  |  |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|----------------------------|---------------|---------------|--|--|--|
|   |          |                       | P         | rior Year     | s                       |           | FY 2016       |                                     |           | FY 2017       |                         | FY        | 2018 Bas      | e                       | FY        | 2018 OC       | 0                       | FY                         | 2018 Tot      | al            |  |  |  |
| Item Number /<br>Title [DODIC]                              | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M)             | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost                  | Qty<br>(Each) | Total<br>Cost |  |  |  |
| AF  |          |                       |           | -             | -                       |           | 1             | 0.032                               |           | -             | -                       |           | 12            | 0.384                   |           | -             | -                       |                            | 12            | 0.3           |  |  |  |
| TRUCK, COMPACT<br>CREW CAB 4X4<br>(2320-01-500-5203)<br>(8) | A        |                       | -         | -             | -                       | 30,427.00 | 6             | 0.183                               | 30,000.00 | 333           | 9.990                   | 31,000.00 | 44            | 1.364                   | 31,000.00 | 2             | 0.062                   | 31,000.00                  | 46            | 1.4           |  |  |  |
| Secondary Distribution                                      | ,        |                       |           |               |                         |           |               |                                     |           |               |                         |           |               |                         |           |               |                         |                            |               |               |  |  |  |
| AF  |          |                       |           | -             | -                       |           | 5             | 0.152                               |           | 326           | 9.780                   |           | 31            | 0.961                   |           | 2             | 0.062                   |                            | 33            | 1.            |  |  |  |
| AFNG  |          |                       |           | -             | -                       |           | -             | -                                   |           | -             | -                       |           | 7             | 0.217                   |           | -             | -                       |                            | 7             | 0.            |  |  |  |
| AFR   |          |                       |           | -             | -                       |           | 1             | 0.030                               |           | 7             | 0.210                   |           | 6             | 0.186                   |           | -             | -                       |                            | 6             | 0.            |  |  |  |
| TRUCK, PICKUP<br>CREW CAB 4X2<br>(2320-01-504-1443)         | А        |                       | -         | -             | -                       | -         | -             | -                                   | 29,000.00 | 249           | 7.221                   | 29,000.00 | 21            | 0.609                   | 29,000.00 | 4             | 0.116                   | 29,000.00                  | 25            | 0.7           |  |  |  |
| Secondary Distribution                                      | ,        |                       |           |               |                         |           | ·             |                                     |           | ,             |                         | ,         |               |                         | ,         | ·             |                         | ,                          |               |               |  |  |  |
| AF  |          |                       |           | -             | -                       |           | -             | -                                   |           | 249           | 7.221                   |           | 21            | 0.609                   |           | 4             | 0.116                   |                            | 25            | 0.            |  |  |  |
| TRUCK, 1/4 TON<br>4X2 EXT CAB<br>(2320-01-496-0404)         | A        |                       | -         | -             | -                       | 22,443.00 | 27            | 0.606                               | 27,000.00 | 166           | 4.482                   | 28,000.00 | 81            | 2.268                   | 28,000.00 | 3             | 0.084                   | 28,000.00                  | 84            | 2.            |  |  |  |
| Secondary Distribution                                      | ,        |                       |           |               |                         | ,         |               |                                     |           |               |                         |           |               |                         |           |               |                         |                            |               |               |  |  |  |
| AF  |          |                       |           | -             | -                       |           | 20            | 0.449                               |           | 151           | 4.077                   |           | 49            | 1.372                   |           | 3             | 0.084                   |                            | 52            | 1.            |  |  |  |
| AFNG  |          |                       |           | -             | -                       |           | -             | -                                   |           | -             | -                       |           | 27            | 0.756                   |           | -             | -                       |                            | 27            | 0.            |  |  |  |
| AFR   |          |                       |           | -             | -                       |           | 7             | 0.157                               |           | 15            | 0.405                   |           | 5             | 0.140                   |           | -             | -                       |                            | 5             | 0.            |  |  |  |
| TRUCK, 4X2<br>UTILITY 9 PAX<br>(2320-01-441-6916)           | Α        |                       | -         | -             | -                       | 30,453.00 | 1             | 0.030                               | 38,000.00 | 9             | 0.342                   | -         | -             | -                       | -         | -             | -                       | -                          | -             |               |  |  |  |
| Secondary Distribution                                      | ,        |                       |           |               |                         |           |               |                                     |           | ,             |                         |           |               |                         |           | ,             |                         |                            |               |               |  |  |  |
| AF  |          |                       |           | -             | -                       |           | -             | -                                   |           | 9             | 0.342                   |           | -             | -                       |           | -             | -                       |                            | -             |               |  |  |  |
| AFR   |          |                       |           | -             | -                       |           | 1             | 0.030                               |           | -             | -                       |           | -             | -                       |           | -             | -                       |                            | -             |               |  |  |  |
| 12 TON STAKE<br>PLATFM TRAILER<br>(2330-01-331-8867)        | A        |                       | -         | -             | -                       | -         | -             | -                                   | -         | -             | -                       | 43,000.00 | 14            | 0.602                   | -         | -             | -                       | 43,000.00                  | 14            | 0.            |  |  |  |
| Secondary Distribution                                      | ,        |                       |           |               |                         |           |               |                                     |           |               |                         |           |               |                         |           | ,             |                         |                            |               |               |  |  |  |
| AF  |          |                       |           | -             | -                       |           | -             | -                                   |           | -             | -                       |           | 9             | 0.387                   |           | -             | -                       |                            | 9             | 0.            |  |  |  |
| AFR   |          |                       |           | -             | -                       |           | -             | -                                   |           | -             | -                       |           | 5             | 0.215                   |           | -             | -                       |                            | 5             | 0.            |  |  |  |
| 12 TON STAKE<br>PLATFORM TRAILER<br>(2330-01-657-3331)      | A        |                       | -         | -             | -                       | 24,780.00 | 1             | 0.025                               | 42,600.00 | 1             | 0.043                   | -         | -             | -                       | -         | -             | -                       | -                          | -             |               |  |  |  |
| Secondary Distribution                                      |          |                       |           |               |                         |           |               |                                     |           |               |                         |           |               |                         |           |               |                         |                            |               |               |  |  |  |
| AF  |          |                       |           | -             | -                       |           | -             | -                                   |           | 1             | 0.043                   |           | -             | -                       |           | -             | -                       |                            | -             |               |  |  |  |
| AFR   |          |                       |           | -             | -                       |           | 1             | 0.025                               |           | -             | -                       |           | -             | -                       |           | -             | -                       |                            | -             |               |  |  |  |
| STLR VAN 30FT 12T<br>(2330-00-865-5443)                     | А        |                       | -         | -             | -                       | -         | -             | -                                   | -         | -             | -                       | 34,000.00 | 21            | 0.714                   | -         | -             | -                       | 34,000.00                  | 21            | 0.            |  |  |  |

LI 822990 - Cargo and Utility Vehicles Air Force

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 02 / 2

822990 / Cargo and Utility Vehicles

**Aggregated Items Title:** Cargo and Utility Vehicles

| 10001 7 02 7 2  |          |                       |           |               |                         |           | -             | 122330 I                | ouigo u   | na Otini      |                         | Cargo and Othity Vericles |               |                         |           |               |                         |            |               |              |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|---------------------------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|--------------|
|   |          |                       | Р         | rior Years    | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY                        | ′ 2018 Bas    | se                      | FY        | / 2018 OC     | 0                       | FY         | 2018 Tot      | al           |
| Item Number /<br>Title [DODIC]                              | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost                 | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Tota<br>Cost |
| Secondary Distribution                                      |          |                       |           |               |                         |           |               |                         |           |               |                         |                           | ,             |                         |           |               |                         |            |               |              |
| AF  |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |                           | 8             | 0.272                   |           | -             | -                       |            | 8             | 0.2          |
| AFNG  |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |                           | 9             | 0.306                   |           | -             | -                       |            | 9             | 0.3          |
| AFR   |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |                           | 4             | 0.136                   |           | -             | -                       |            | 4             | 0.           |
| TRK TRACTOR<br>(2320-01-482-9775)                           | А        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 365,000.00                | 8             | 2.920                   | -         | -             | -                       | 365,000.00 | 8             | 2.           |
| Secondary Distribution                                      |          |                       |           |               |                         | ,         |               |                         |           |               |                         | ,                         | ,             |                         |           |               |                         |            | ·             |              |
| AF  |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |                           | 4             | 1.460                   |           | -             | -                       |            | 4             | 1            |
| AFR   |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |                           | 4             | 1.460                   |           | -             | -                       |            | 4             | 1            |
| TRAILER, DETACHABL<br>GOOSENECK 60TON<br>(2330-00-349-2572) | EΑ       |                       | -         | -             | -                       | 45,147.00 | 1             | 0.045                   | 76,534.00 | 49            | 3.750                   | -                         | -             | -                       | -         | -             | -                       | -          | -             |              |
| Secondary Distribution                                      |          |                       |           |               |                         |           |               |                         |           |               |                         | ,                         | ,             |                         |           | ·             |                         |            |               |              |
| AF  |          |                       |           | -             | -                       |           | 1             | 0.045                   |           | 44            | 3.367                   |                           | -             | -                       |           | -             | -                       |            | -             |              |
| AFR   |          |                       |           | -             | -                       |           | -             | -                       |           | 5             | 0.383                   |                           | -             | -                       |           | -             | -                       |            | -             |              |
| TRK CARRYALL<br>4X4 7500 GVW<br>(2320-00-950-4238)          | А        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 42,000.00                 | 22            | 0.924                   | 42,000.00 | 4             | 0.168                   | 42,000.00  | 26            | 1            |
| Secondary Distribution                                      |          |                       |           |               | ,                       |           |               |                         |           |               |                         |                           | •             |                         |           |               |                         |            |               |              |
| AF  |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |                           | 20            | 0.840                   |           | 4             | 0.168                   |            | 24            | 1            |
| AFNG  |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |                           | 2             | 0.084                   |           | -             | -                       |            | 2             | C            |
| btotal: Uncategorized                                       | _        |                       | -         | -             | -                       | -         | -             | 12.483                  | -         | -             | 134.455                 | -                         | -             | 28.670                  | -         | -             | 1.882                   | -          | -             | 30           |
| otal  |          |                       | -         | -             | -                       | -         | -             | 12.483                  | -         | -             | 134.455                 | -                         | -             | 28.670                  | -         | -             | 1.882                   | -          | -             | 30.          |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks

Based on AF Mission changes and/or AF Mission priorities, NSNs and/or quantities may change during year of execution.

FY18 UNIT COSTS ARE SUBJECT TO CHANGE.

PROGRAM MANAGEMENT JUSTIFICATION (PMA): PMA supports the operation of the program office in its management and oversight role via travel, procurement of supplies and Advisory and Administration Services (A&AS).

#### Footnotes:

- (1) FY17 1 EA OCO FUNDS \$0.420M
- (2) FY17 1 EA OCO FUNDS \$0.041M
- (3) FY17 56 EA OCO FUNDS \$1.904M
- (4) FY17 25 EA OCO FUNDS \$0.775M
- <sup>(5)</sup> FY17 25 EA OCO FUNDS \$0.675M
- (6) FY17 37 EA OCO FUNDS \$1.369M
- (7) (Airfield Damage Repair) FY16 REQ @10 each; PEC 0305114F AIR TRAFFIC CONTROL, APPROACH AND LANDING SYSTEM (ATCALS).
- (8) FY17 236 EA OCO FUNDS \$7.080M



**Date:** May 2017 Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special 823230 / Security And Tactical Vehicles

Purpose Vehicles

Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|   | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
|---|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                              | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 1.684            | 40.361            | 59.398           | 1.100            | 60.498         | 31.598          | 55.274        | 55.924  | 56.585  | -        | 301.924 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -            | 1.684            | 40.361            | 59.398           | 1.100            | 60.498         | 31.598          | 55.274        | 55.924  | 56.585  | -        | 301.924 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -            | 1.684            | 40.361            | 59.398           | 1.100            | 60.498         | 31.598          | 55.274        | 55.924  | 56.585  | -        | 301.924 |
| (The following                                | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         | ·        |         |
| Initial Spares (\$ in Millions)               | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |

## Description:

Funding provides for a variety of security and tactical vehicles essential to strategic military operations. This program previously procured the standard diesel powered High Mobility Multi-purpose Wheeled Vehicle (HMMWV) and all configurations used by the Air Force, Guardian Angel Air-Deployable Rescue Vehicle (GAARV), and cargo trailers. Funding will be used to procure next generation security and tactical vehicles to include the fielding of the Joint Light Tactical Vehicle (JLTV).

The M1101 and M1102 are light tactical trailers (designated by load weight) in a single axle, two wheel trailer designed to be towed by a HMMWV towing vehicle. The trailers have the same tires, wheels, and track width as the HMMWV. The only difference between the M1101 and the M1102 trailer is the model information and payload capacity. The trailers have various applications and provide the forces with a light, nimble, rugged trailer built primarily for hauling cargo.

Joint Light Tactical Vehicles (JLTV) is the HMMWV replacement for the DOD. The USAF investment in JLTVs will begin in FY17 and continue through the FYDP. The USAF JLTV program will need multiple STS Work Directives generated and worked through the Joint Program Office (JPO) for USAF specific requirements and kit operability on four JLTV variants and a JLTV trailer. The four variants include the General Purpose (GP) JLTV, the Utility (UT) JLTV, the Heavy Guns Carrier (HGC) JLTV, and the Close Combat Weapons Carrier (CCWC). FY17 funding will define the user configurations on each platform prior to Full Rate Production that is expected to begin in FY18. Purchase of CFE and GFE kits, as well as at least one JLTV in each variant: GP, UTL, HGC and CCWC will be executed in FY17. Technical Data Packages, as well as USAF specific Tech Data and support will also be provisioned and worked during this time to support the incoming inventory once testing is complete.

Guardian Angel Air-Deployable Rescue Vehicle: The Guardian Angel Air-Deployable Rescue Vehicle (GAARV) is an air-deployable surface recovery platform capable of maneuvering over adverse terrain in order to search for and recover isolated personnel and/or equipment. It will provide increased survivability during "outside the wire" personnel recovery operations, more secure transportation capability to the recovery team and injured/isolated personnel from an area of high threat, and necessary training platforms for operators to familiarize themselves with vehicles they utilize in the area of operations. It also provides operators with increased protection from enemy fire and improvised explosive devices. Funding includes, but is not limited to procurement of end items, training, upgrades, spares, Interim Contractor Support (ICS), repairs, deployment packages and returns. This funding request will support potential DMS and obsolescence solutions, to include if optimal, life of type buys or bridge buys limited to the program of record quantity. Due to rapidly changing threat environment, the acquisition program manager has the authority to redirect funding as necessary to meet current slated and emerging requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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| Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles  ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: N/A  Line Item MDAP/MAIS Code: N/A Funding for this exhibit contained in PEs 0202834F, 0207227F, 0502834F, 0502844F, 0702831F, 0804731F. | es<br>ted Program Elements: N/A |
|--|---------------------------------|
| Line Item MDAP/MAIS Code: N/A  | ted Program Elements: N/A       |
|  |                                 |
| Funding for this exhibit contained in PEs 0202834F, 0207227F, 0502834F, 0502844F, 0702831F, 0804731F.  |                                 |
|  |                                 |
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LI 823230 - Security And Tactical Vehicles Air Force

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special 823230 / Security And Tactical Vehicles

Purpose Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Security And Tactical Vehicles |             |          |                       | - / -                                    | - / 1.684                                | - /40.361                                | - / 59.398                               | - / 1.100                                | - / 60.498                               |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 1.684                                | - / 40.361                               | - / 59.398                               | - / 1.100                                | - / 60.498                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 procurement dollars in the amount of \$59.398M procures, but is not limited to 444 vehicles in support of the installation and unit mission requirements for Air Force personnel. For Guardian Angel Air Deployable Rescue Vehicle, funding will include, but not be limited to, the necessary support of GAARV vehicles.

FY18 OCO dollars in the amount of \$1.100M will procure, but is not limited to, 31 vehicles in support of Overseas Contingency Operations.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 02 / 3

823230 / Security And Tactical Vehicles

Aggregated Items Title:
Security And Tactical Vehicles

|  |          |                       | F         | rior Year            | s                       |            | FY 2016       |                         |            | FY 2017              |                         | F۱         | / 2018 Bas           | se                      | F۱         | / 2018 OC     | 0                       | FY 2018 Total |               |                         |
|--|----------|-----------------------|-----------|----------------------|-------------------------|------------|---------------|-------------------------|------------|----------------------|-------------------------|------------|----------------------|-------------------------|------------|---------------|-------------------------|---------------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]                                     | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized  |          |                       |           |                      |                         |            |               |                         |            |                      |                         |            |                      |                         |            |               |                         |               |               |                         |
| HIGH MOBILITY<br>TRAILER, LIGHT<br>M1101 (NSN<br>2330-01-388-6662) | A        |                       | -         | -                    | -                       | 10,954.66  | 3             | 0.033                   | 29,245.00  | 30                   | 0.877                   | 29,245.00  | 88                   | 2.574                   | -          | -             | -                       | 29,245.00     | 88            | 2.574                   |
| JLTV General<br>Purpose (GP) -<br>2320-01-653-6557                 | А        |                       | -         | -                    | -                       | -          | -             | -                       | 375,000.00 | 29                   | 10.875                  | 375,000.00 | 46                   | 17.250                  | 375,000.00 | 2             | 0.750                   | 375,000.00    | 48            | 18.000                  |
| JLTV Utility (UT) -<br>2320-01-653-6516                            | A        |                       | -         | -                    | -                       | -          | -             | -                       | 375,000.00 | 29                   | 10.875                  | 375,000.00 | 46                   | 17.250                  | -          | -             | -                       | 375,000.00    | 46            | 17.250                  |
| JLTV Heavy Guns<br>Carrier (HGC) -<br>2320-01-653-6495             | А        |                       | -         | -                    | -                       | -          | -             | -                       | 375,000.00 | 28                   | 10.500                  | 375,000.00 | 46                   | 17.250                  | -          | -             | -                       | 375,000.00    | 46            | 17.250                  |
| JLTV Trailer -<br>2330-01-653-9745                                 | А        |                       | -         | -                    | -                       | -          | -             | -                       | 59,750.00  | 30                   | 1.793                   | 63,475.00  | 46                   | 2.920                   | -          | -             | -                       | 63,475.00     | 46            | 2.920                   |
| HMMWV, M1151A1<br>(2320015402038)                                  | А        |                       | -         | -                    | 0.000                   | -          | -             | -                       | -          | -                    | -                       | -          | -                    | -                       | -          | -             | -                       | -             | -             | -                       |
| M1102<br>TRAILER (NSN:<br>2330-01-387-5426)                        | А        |                       | -         | -                    | -                       | 8,813.60   | 10            | 0.088                   | 8,000.00   | 29                   | 0.232                   | 10,401.00  | 86                   | 0.894                   | 10,401.00  | 14            | 0.146                   | 10,401.00     | 100           | 1.040                   |
| GUARDIAN ANGEL<br>AIR-DEPLOYABLE<br>RESCUE VEHICLE<br>(GAARV)      | А        |                       | -         | -                    | -                       | 420,500.00 | 2             | 0.841                   | 356,363.64 | 11                   | 3.920                   | 90,000.00  | 1                    | 0.090                   | -          | -             | -                       | 90,000.00     | 1             | 0.090                   |
| HMMWV M1152A1<br>(2320-01-540-2007)                                | А        |                       | -         | -                    | 0.000                   | -          | -             | -                       | -          | -                    | -                       | -          | -                    | -                       | -          | -             | -                       | -             | -             | -                       |
| TRL CGO 1.5T M105<br>(2330-00-541-6466)                            | А        |                       | -         | -                    | -                       | -          | -             | -                       | 10,240.00  | 61                   | 0.625                   | 13,647.00  | 85                   | 1.160                   | 13,647.00  | 15            | 0.205                   | 13,647.00     | 100           | 1.365                   |
| PMA OTHER<br>GOVERNMENT<br>COSTS                                   | Α        |                       | -         | -                    | -                       | -          | -             | 0.005                   | 15,000.00  | 1                    | 0.015                   | -          | -                    | 0.010                   | -          | -             | -                       | -             | -             | 0.010                   |
| PMA CONTRACTOR<br>SERVICES   | Α        |                       | -         | -                    | -                       | -          | -             | 0.717                   | 649,500.00 | 1                    | 0.650                   | -          | -                    | -                       | -          | -             | -                       | -             | -             | -                       |
| Subtotal: Uncategorized  |          |                       | -         | -                    | -                       | -          | -             | 1.684                   | -          | -                    | 40.361                  | -          | -                    | 59.398                  | -          | -             | 1.100                   | -             | -             | 60.498                  |
| Total  |          |                       | -         | -                    | -                       | -          | -             | 1.684                   | -          | -                    | 40.361                  | -          | -                    | 59.398                  | -          | -             | 1.100                   | -             | -             | 60.498                  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

PMA Justification:

PROGRAM MANAGEMENT ADMINISTRATION (PMA): PMA supports the operation of the program office in its management and oversight role via travel, procurement of supplies and Advisory and Administrative Services (A&AS). The A&AS team of contractors will begin the program and sustainment planning to include provisioning/cataloging and technical order management support AF building of the Joint Light Tactical Vehicle (JLTV). Funding will also support TDY requirements associated with JLTV.

Guardian Angel Air-Deployable Rescue Vehicle (GAARV):

LI 823230 - Security And Tactical Vehicles
Air Force

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P-1 Line #5

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| xhibit P-40a, Budget Item Justification For Aggregated   | Items: FY 2018 Air Force   | <b>Date</b> : May 2017  |
|--|--|---|
| ppropriation / Budget Activity / Budget Sub Activity:  | P-1 Line Item Number / Title:  | Aggregated Items Title:   |
| 080F / 02 / 3  | 823230 / Security And Tactical Vehicles  | Security And Tactical Vehicles  |
| ased on AF Mission changes and/or AF Mission priorities, NSNs and/or quantities meployment packages and returns. | nay change during year of execution. GAARV unit cost is approximately \$300,00 | 0.00 per vehicle and does not include training, upgrades, spares, repairs |
| Y18 funding will provide for the necessary GAARV support.  |  |   |
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LI 823230 - Security And Tactical Vehicles Air Force

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P-1 Line #5



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special 823990 / Special Purpose Vehicles

Purpose Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior        |                  |                    | FY 2018          | FY 2018          | FY 2018         |                 |               |         |         | То       |         |
|--|--------------|------------------|--------------------|------------------|------------------|-----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years        | FY 2016          | FY 2017            | Base             | oco              | Total           | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                  | -                | -                | -               | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 9.102            | 56.412             | 19.784           | 32.479           | 52.263          | 13.309          | 24.356        | 25.567  | 25.364  | -        | 206.373 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -               | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 9.102            | 56.412             | 19.784           | 32.479           | 52.263          | 13.309          | 24.356        | 25.567  | 25.364  | -        | 206.373 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -               | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 9.102            | 56.412             | 19.784           | 32.479           | 52.263          | 13.309          | 24.356        | 25.567  | 25.364  | -        | 206.373 |
| (The following                                 | Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget requests | s are documente | d elsewhere.) | •       |         |          |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                  | -                | -                | -               | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                  | -                | -                | -               | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                  | -                | -                | -               | -               | -             | -       | -       | -        | -       |

### Description:

FY17 funding totals include \$16.789M appropriated for Overseas Contingency Operations.

The Special Purpose Vehicles group consists of various vehicles for flightline, maintenance, and facility operations used for a variety of purposes. Examples of these vehicles include the IW 40 tractor, 4 and 8 passenger over-the-snow-carriers, an assortment of wreckers and refuse trucks, potable and non-potable water distribution trucks, refueling vehicles, deicers, staircase trucks, layatory service trucks, high reach maintenance trucks, glycol recovery vehicles, disabled patient vehicles, and tow tractors. Tow tractors are used to tow aircrafts, munition trailers, and ground support equipment. The IW 40 tractor is a small farm tractor used primarily to pull a mower and for other light tasks; the snow carriers are tracked vehicles which move personnel in snowy conditions and are used in search and rescue missions; the wreckers are used to move disabled vehicles, haul vehicles or to deploy a heavy duty winch. The refuse trucks in this group include one which tilts and dumps a payload and one which compacts refuse prior to discharge. Aircraft refueling vehicles refuel and defuel aircrafts. Potable water distribution trucks provide drinking water to personnel; non-potable water distribution trucks are used primarily to wet down and control dust at a construction site.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PEs 0202834F. 0207597F. 0401221F. 0502834F. 0502844F 0702831F.

|      | Secondary Distribution     | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF   | Quantity                   | 51      | 309     | 86              | 172            | 258              | 0       | 0       | 0       | 0       |
|      | Total Obligation Authority | 5.696   | 53.483  | 13.998          | 32.479         | 46.477           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG | Quantity                   | 5       | 0       | 31              | 0              | 31               | 0       | 0       | 0       | 0       |
|      | Total Obligation Authority | 0.378   | 0.000   | 4.000           | 0.000          | 4.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR  | Quantity                   | 21      | 19      | 12              | 0              | 12               | 0       | 0       | 0       | 0       |
|      | Total Obligation Authority | 3.028   | 2.929   | 1.786           | 0.000          | 1.786            | 0.000   | 0.000   | 0.000   | 0.000   |

LI 823990 - Special Purpose Vehicles Air Force

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P-1 Line #6

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special 823990 / Special Purpose Vehicles

Purpose Vehicles

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

| Secondary              | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| Total:                 | Quantity                   | 77      | 328     | 129             | 172            | 301              | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 9.102   | 56.412  | 19.784          | 32.479         | 52.263           | 0.000   | 0.000   | 0.000   | 0.000   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special 823990 / Special Purpose Vehicles

Purpose Vehicles

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Special Purpose Vehicles       |             |          |                       | - / -                                    | - / 9.102                                | - / 56.412                               | - / 19.784                               | - / 32.479                               | - / 52.263                               |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 9.102                                | - / 56.412                               | - / 19.784                               | - / 32.479                               | - / 52.263                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 procurement dollars in the amount of \$19.784M procures, but is not limited to, 129 vehicles in support of installation and unit mission requirements for Air Force personnel.

FY18 OCO dollars in the amount of \$32.479M will procure, but is not limited to, 172 vehicles in support of Overseas Contingency Operations.

LI 823990 - Special Purpose Vehicles Air Force

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P-1 Line #6

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:

823990 / Special Purpose Vehicles

FY 2018 OCO FY 2016 **FY 2017** FY 2018 Total **Prior Years FY 2018 Base** MDAP/ Total Total Total Total Total Total Item Number / ID MAIS **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty **Unit Cost Unit Cost** Qty Qty Cost Cost Cost Qty Cost Cost **Unit Cost** Cost Title [DODIC] CD Code (\$ M) (Each) (\$ M) Uncategorized C5 STAIRCASE TRK 0.301 0.301 0.323 5 1.614 0.323 3 0.969 0.323 2.583 (1730-01-602-5661YW Secondary Distribution 3 4 1.291 0.969 2.260 AFNG 0.323 0.323 AFR 0.301 -CONTRACT 0.076 0.605 MAINT TRUCK 8 (2320-01-590-4213YW) Secondary Distribution 0.227 AF 3 AFNG 5 0.378 -------HI-REACH TRUCK 0.180 0.180 55' (2320-00-995-5610YW) Secondary Distribution AFR 0.180 C5 HI-LIFT TRUCK 0.203 0.203 (2320-01-305-6339YW) Secondary Distribution AFR 1 0.203 POTABLE WATER TRUCK 0.069 0.069 (2320-00-089-8979YW) Secondary Distribution AFR 0.069 1 TOW TRACTOR, MB-2 0.146 0.585 (1740-01-552-9854YW) Secondary Distribution AF 2 0.292 2 AFR \_ 0.292 \_ TRK HILIFT 0.190 0.795 0.199 0.795 0.190 0.199 (2320-00-540-3489) Secondary Distribution AF 0.190 3 0.596 3 0.596 AFNG 1 0.199 0.199 ----1 4000GAL DEICER (1730-01-605-7637YW) 0.304 10 3.040 0.304 10 3.040 0.304 1.216 0.304 14 4.256 Secondary Distribution

LI 823990 - Special Purpose Vehicles Air Force

3080F / 02 / 3

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P-1 Line #6

Special Purpose Vehicles

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 02 / 3

P-1 Line Item Number / Title:

823990 / Special Purpose Vehicles

Aggregated Items Title:

Special Purpose Vehicles

FY 2018 OCO FY 2016 **FY 2017** FY 2018 Total **Prior Years FY 2018 Base** MDAP/ Total Total Total Total Total Total Item Number / ID MAIS Unit Cost Qty **Unit Cost** Qty Cost Cost Cost Cost Cost Cost Title [DODIC] CD Code (\$ M) (Each) (\$ M) AF 10 3.040 2.736 1.216 13 3.952 **AFNG** 0.304 0.304 TRAC ACFT TWG MB-4 0.111 0.119 2.729 0.115 0.576 0.111 0.119 1.068 23 0.119 32 3.797 5 (1740-00-580-7990YW) Secondary Distribution AF 5 0.576 0.111 6 0.712 23 2.729 29 3.441 AFNG 3 0.356 3 0.356 TOW TRACTOR, Α 0.130 0.130 0.158 9 1.423 0.158 27 4.269 0.158 36 5.693 MR-2 (1740-00-143-8464YW) Secondary Distribution 6 27 AF 0.949 4.269 33 -5.218 3 **AFNG** 0.474 3 0.474 AFR 1 0.130 ---FLIGHT LINE TOW TRACTOR, 4X2 0.055 18 0.990 0.045 89 4.005 0.062 24 1.492 0.062 25 1.554 0.062 49 3.046 (1740-01-068-8945YW) Secondary Distribution 15 0.825 4.005 17 1.057 25 89 1.554 42 2.610 **AFNG** 4 0.249 0.249 AFR 3 0.165 3 0.186 3 0.186 TRUCK. Α MAINTENANCE 70 0.254 0.036 0.033 2.310 0.036 0.254 3/4T 4X4 (2320-00-541-1714) Secondary Distribution AF 70 2.310 2 0.072 0.072 2 4 **AFNG** 0.145 0.145 AFR 0.036 0.036 TRUCK. TELEPHONE MAINT 0.028 0.256 0.035 0.210 9 6 STD UTIL 4x2 (2320-00-801-9193) Secondary Distribution AF 6 0.171 AFR 3 0.085 6 0.210 -3 TON STAKE 1.011 AND PLATFORM 0.166 0.498 0.169 6 1.011 0.169 (2320-00-935-4696)

LI 823990 - Special Purpose Vehicles Air Force

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P-1 Line #6

**Date:** May 2017

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:

| 080F / 02 / 3   |         |                       |           |                      |                         |           | 8                    | 323990 <i>1</i>         | Special   | Purpose       | venicie                 | es        |               |                         | 5         | oecial Pu            | urpose v                | venicles  |               |              |
|---|---------|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|--------------|
|   |         |                       | Р         | rior Year            | s                       |           | FY 2016              |                         |           | FY 2017       |                         | FY        | ′ 2018 Bas    | se                      | FY        | ′ 2018 OC            | 0                       | FY        | 2018 Tot      | tal          |
| Item Number /<br>Title [DODIC]                            | $\perp$ | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Tota<br>Cost |
| Secondary Distribution                                    | 1       |                       |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |               | ,            |
| AF  |         |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 4             | 0.674                   |           | -                    | -                       |           | 4             | 0.           |
| AFR   |         |                       |           | -                    | -                       |           | -                    | -                       |           | 3             | 0.498                   |           | 2             | 0.337                   |           | -                    | -                       |           | 2             | 0            |
| TRK TANK<br>1200G 4X2<br>(2320-00-177-6777)               | А       |                       | -         | -                    | -                       | 0.119     | 1                    | 0.119                   | 0.126     | 1             | 0.126                   | -         | -             | -                       | -         | -                    | -                       | -         | -             |              |
| Secondary Distribution                                    | 1       |                       |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |              |
| AFR   |         |                       |           | -                    | -                       |           | 1                    | 0.119                   |           | 1             | 0.126                   |           | -             | -                       |           | -                    | -                       |           | -             |              |
| TRK TNK FUEL<br>6000GAL R-11<br>(2320-00-433-5695)<br>(4) | А       |                       | -         | -                    | -                       | 0.225     | 16                   | 3.592                   | 0.200     | 7             | 1.400                   | 0.209     | 29            | 6.072                   | 0.209     | 42                   | 8.795                   | 0.209     | 71            | 14           |
| Secondary Distribution                                    | 1       |                       |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |           | ,                    |                         |           |               |              |
| AF  |         |                       |           | -                    | -                       |           | 11                   | 2.470                   |           | 3             | 0.600                   |           | 17            | 3.560                   |           | 42                   | 8.795                   |           | 59            | 12           |
| AFNG  |         |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 9             | 1.885                   |           | -                    | -                       |           | 9             |              |
| AFR   |         |                       |           | -                    | -                       |           | 5                    | 1.123                   |           | 4             | 0.800                   |           | 3             | 0.628                   |           | -                    | -                       |           | 3             | (            |
| TRUCK, EXTENDED<br>REACH DEICER<br>(1730-01-495-5449YW    | A<br>/) |                       | -         | -                    | -                       | 0.097     | 1                    | 0.097                   | 0.663     | 20            | 13.260                  | -         | -             | -                       | -         | -                    | -                       | -         | -             |              |
| Secondary Distribution                                    | ,       |                       |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |               | ,            |
| AF  |         |                       |           | -                    | -                       |           | 1                    | 0.097                   |           | 20            | 13.260                  |           | -             | -                       |           | -                    | -                       |           | -             |              |
| TRK MNT DIGGER<br>DERRICK<br>(2320-01-397-7528)           | А       |                       | -         | -                    | -                       | 0.276     | 1                    | 0.276                   | 0.288     | 3             | 0.864                   | 0.292     | 7             | 2.047                   | -         | -                    | -                       | 0.292     | 7             | :            |
| Secondary Distribution                                    | ,       |                       |           |                      |                         |           |                      |                         | '         |               |                         |           | ,             |                         |           |                      |                         |           |               |              |
| AF  |         |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 5             | 1.462                   |           | -                    | -                       |           | 5             |              |
| AFR   |         |                       |           | -                    | -                       |           | 1                    | 0.276                   |           | 3             | 0.864                   |           | 2             | 0.585                   |           | -                    | -                       |           | 2             | (            |
| TRLR MAINT<br>(2330-01-308-8926)                          | Α       |                       | -         | -                    | -                       | -         | -                    | -                       | 0.012     | 5             | 0.060                   | 0.013     | 16            | 0.212                   | 0.013     | 5                    | 0.066                   | 0.013     | 21            | (            |
| Secondary Distribution                                    | )       |                       |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |              |
| AF  |         |                       |           | -                    | -                       |           | -                    | -                       |           | 5             | 0.060                   |           | 10            | 0.132                   |           | 5                    | 0.066                   |           | 15            | (            |
| AFNG  |         |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 5             | 0.066                   |           | -                    | -                       |           | 5             | (            |
| AFR   |         |                       |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | 1             | 0.013                   |           | -                    | -                       |           | 1             | (            |
| 2000GAL DEICER<br>(1730-01-605-7636YW                     | A<br>/) |                       | -         | -                    | -                       | 0.241     | 1                    | 0.241                   | 0.210     | 2             | 0.420                   | 0.250     | 3             | 0.751                   | -         | -                    | -                       | 0.250     | 3             | (            |
| Secondary Distribution                                    |         |                       |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |              |
| AF  |         |                       |           | -                    | -                       |           | 1                    | 0.241                   |           | 2             | 0.420                   |           | 3             | 0.751                   |           | -                    | -                       |           | 3             |              |
| PMA OTHER<br>GOVERNMENT<br>COSTS                          | A       |                       | -         | -                    | -                       | 0.008     | 1                    | 0.008                   | -         | -             | 0.002                   | -         | -             | 0.005                   | -         | -                    | -                       | -         | -             | (            |

LI 823990 - Special Purpose Vehicles Air Force

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P-1 Line #6

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 02 / 3

P-1 Line Item Number / Title:

823990 / Special Purpose Vehicles

Aggregated Items Title:

Special Purpose Vehicles

| JOUE / UZ / J  |    |                       |           |                      |                         |           |               | 200001                  | Special   | uiposc        | , v Ci iicic            | ,,,       |               |                         |           | occiai i c    | ulbose v                | VCITICICS |               |                         |
|--|----|-----------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |    |                       | P         | rior Years           | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Bas    | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 Tot      | tal                     |
| Item Number /<br>Title [DODIC]                         | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Secondary Distribution                                 |    |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |    |                       |           | -                    | -                       |           | 1             | 0.008                   |           | -             | 0.002                   |           | -             | 0.005                   |           | -             | -                       |           | -             | 0.0                     |
| STAIRCASE TRK<br>(1730-01-601-8086YW)                  | Α  |                       | -         | -                    | -                       | 0.145     | 6             | 0.869                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                                 |    |                       | l l       |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |    |                       |           | -                    | -                       |           | 5             | 0.724                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| AFR  |    |                       |           | _                    | _                       |           | 1             | 0.145                   |           | -             | _                       |           | -             |                         |           | _             |                         |           | _             |                         |
| TRUCK WRECKER<br>TILT BED<br>(2320-01-380-4755)        | A  |                       | -         | -                    | -                       | 0.097     | 1             | 0.097                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                                 |    |                       |           |                      | •                       |           |               |                         |           |               |                         |           |               |                         |           | •             |                         |           |               |                         |
| AFR  |    |                       |           | -                    | -                       |           | 1             | 0.097                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| LAVATORY<br>SERVICE TRK<br>(1730-00-981-7605YW)<br>(6) | A  |                       | -         | -                    | -                       | -         | -             | -                       | 0.109     | 12            | 1.311                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution                                 |    |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |    |                       |           | -                    | -                       |           | -             | -                       |           | 12            | 1.311                   |           | -             | -                       |           | -             | -                       |           | -             |                         |
| TRAC ACFT TOW<br>(1740-01-367-9485YW)<br>(7)           | А  |                       | -         | -                    | -                       | -         | -             | -                       | 0.314     | 16            | 5.024                   | -         | -             | -                       | 0.346     | 28            | 9.674                   | 0.346     | 28            | 9.6                     |
| Secondary Distribution                                 |    |                       |           |                      | l.                      |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |    |                       |           | -                    | -                       |           | -             | -                       |           | 16            | 5.024                   |           | -             | -                       |           | 28            | 9.674                   |           | 28            | 9.6                     |
| TRK REFRGR 4X2<br>(2320-00-770-4467)<br>(8)            | А  |                       | -         | -                    | -                       | -         | -             | -                       | 0.115     | 4             | 0.460                   | -         | -             | -                       | 0.097     | 4             | 0.390                   | 0.097     | 4             | 0.3                     |
| Secondary Distribution                                 |    |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |    |                       |           | -                    | -                       |           | -             | -                       |           | 4             | 0.460                   |           | -             | -                       |           | 4             | 0.390                   |           | 4             | 0.3                     |
| TRK HYDRANT FUEL<br>(2320-01-125-2481)<br>(9)          | A  |                       | -         | -                    | -                       | 0.275     | 1             | 0.275                   | 0.211     | 4             | 0.844                   | -         | -             | -                       | 0.410     | 4             | 1.640                   | 0.410     | 4             | 1.6                     |
| Secondary Distribution                                 |    |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |    |                       |           | -                    | -                       |           | -             | -                       |           | 4             | 0.844                   |           | -             | -                       |           | 4             | 1.640                   |           | 4             | 1.6                     |
| AFR  |    |                       |           | -                    | -                       |           | 1             | 0.275                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| TRK FUEL AVGAS<br>(2320-01-597-1728)<br>(10)           | А  |                       | -         | -                    | -                       | -         | -             | -                       | 0.142     | 10            | 1.420                   | -         | -             | -                       | 0.168     | 7             | 1.178                   | 0.168     | 7             | 1.                      |
| Secondary Distribution                                 |    |                       |           |                      | 1                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |    |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Items Title: 3080F / 02 / 3 Special Purpose Vehicles 823990 / Special Purpose Vehicles

|  |    |                       |           |               |                         |           |               |                         | •         | •             |                         |           |               |                         |           |               | •                       |           |               |               |
|--|----|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|---------------|
|  |    |                       | Р         | rior Years    | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | / 2018 OC     | :0                      | FY        | 2018 To       | tal           |
| Item Number /<br>Title [DODIC]                     | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost |
| STLR M1000 70<br>TON TK TRNSPTR<br>(2330013038832) | A  |                       | -         | -             | -                       | 0.066     | 1             | 0.066                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |               |
| Secondary Distribution                             |    |                       | '         |               |                         |           |               |                         |           |               |                         |           |               |                         | '         |               |                         | '         |               |               |
| AF   |    |                       |           | -             | -                       |           | 1             | 0.066                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |               |
| FFTT, 4X4<br>(1740014524117YW)                     | Α  |                       | -         | -             | -                       | -         | -             | -                       | 0.063     | 35            | 2.189                   | -         | -             | -                       | -         | -             | -                       | -         | -             |               |
| Secondary Distribution                             |    |                       |           |               |                         |           |               |                         |           | ·             |                         |           |               |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | -             | -                       |           | -             | -                       |           | 35            | 2.189                   |           | -             | -                       |           | -             | -                       |           | -             |               |
| DEICER TRK<br>MOUNTED<br>(1730005556205YW)         | А  |                       | -         | -             | -                       | -         | -             | -                       | 0.675     | 27            | 18.237                  | -         | -             | -                       | -         | -             | -                       | -         | -             |               |
| Secondary Distribution                             |    |                       |           |               |                         |           |               |                         |           | ·             |                         |           |               |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | -             | -                       |           | -             | -                       |           | 27            | 18.237                  |           | -             | -                       |           | -             | -                       |           | -             |               |
| ubtotal: Uncategorized                             |    |                       | -         | -             | -                       | -         | -             | 9.102                   | -         | -             | 56.412                  | -         | -             | 19.784                  | -         | -             | 32.479                  | -         | -             | 52.           |
| 'otal  |    |                       | - 1       | -             | -                       | -         | -             | 9.102                   | -         | _             | 56.412                  | _         | -             | 19.784                  | _         | -             | 32.479                  | -         | _             | 52.2          |

#### Remarks:

1740005807990YW 4ea @ \$115204.40ea = \$460817.60 is ERI OCO funds.

1740010688945YW 8ea @ 54980.39ea = \$439834.12 is ERI OCO funds.

PROGRAM MANAGEMENT ADMINISTRATION (PMA): PMA supports the operation of the program office in its management and oversight role via travel, procurement of supplies and Advisory and Administrative Services (A&AS).

#### Footnotes:

- (1) FY17 8 EA OCO FUNDS \$2.432M
- (2) FY16 OCO FUNDING TO SUPPORT USAFE ERI AT 4 EACH
- (3) FY16 OCO FUNDING TO SUPPORT USAFE ERI AT 8 EACH.; FY17 16 EA OCO FUNDS \$0.720M
- $^{(4)}$  FY16 OCO FUNDING TO SUPPORT USAFE ERI AT 16 EACH.; FY17 3 EA OCO FUNDS \$0.600M
- (5) FY16 UNIT COST IS PART OF 1ST PRODUCTION COST ONLY.; FY17 6 EA OCO FUNDS \$3.978M
- (6) FY17 12 EA OCO FUNDS \$1.311M
- <sup>(7)</sup> FY17 16 EA OCO FUNDS \$5.024M
- (8) FY17 4 EA OCO FUNDS \$0.460M
- (9) FY17 4 EA OCO FUNDS \$0.844M
- <sup>(10)</sup> FY17 10 EA OCO FUNDS \$1.420M

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 4: Fire

824010 / FIRE FIGHTING/CRASH RESCUE VEHICLES

Fighting Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: 0202834F, 0901279F

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Ellic Relli MDAI /MAIO GGGC: 14//             |              |                  |                    |                  |                  |                |                 |               |         |         |          |         |
|---|--------------|------------------|--------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
|   | Prior        |                  |                    | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
| Resource Summary                              | Years        | FY 2016          | FY 2017            | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 10.419           | 155.041            | 14.768           | 22.583           | 37.351         | 15.712          | 16.799        | 17.084  | 17.374  | -        | 269.780 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -            | 10.419           | 155.041            | 14.768           | 22.583           | 37.351         | 15.712          | 16.799        | 17.084  | 17.374  | -        | 269.780 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -            | 10.419           | 155.041            | 14.768           | 22.583           | 37.351         | 15.712          | 16.799        | 17.084  | 17.374  | -        | 269.780 |
| (The following                                | Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         | ĺ        |         |
| Initial Spares (\$ in Millions)               | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |

### **Description:**

FY17 funding totals include \$48.590M appropriated for Overseas Contingency Operations.

This P-1 line procures a variety of critical fire fighting and crash rescue vehicles. Vehicles typically include, but are not limited to the following:

- -- The P-19 Crash Truck is an Air Rescue and Fire Fighting (ARFF) vehicle that is a first response vehicle on the scene of an aircraft fire emergency. It equips bases with the capability to rapidly extinguish aircraft fires. This truck is a mandatory flight line operations safety requirement and is essential at bases with a flying mission. The P-19 also provides fire fighting capability for Air National Guard and Air Force Reserve installations located at municipal airports. An installation's P-19 requirement is determined by the type of aircraft frequenting the aerial facility and the resulting gallons per minute of fire fighting agent required. This vehicle provides aircrew, passenger, weapons, and airframe fire protection at a crash site.
- -- The P-21 Aerial Lift Truck is a fire fighting vehicle with a 105 foot aerial ladder. It provides improved agent delivery over older model vehicles, as well as the capability to provide elevated delivery of agent involving high rise buildings and warehouse facilities.
- -- The P-22 4x2 and P-24 4x4 Pumper Trucks are designed primarily to fight structural fires. The trucks have a 750-gallon water tank and a 50-gallon Aqueous FilmFoam class "A" foam tank and are capable of applying 1250 gallons per minute. P-24 is built on a rugged 4x4 chassis that equips forces with limited off-road/rugged terrain capability. The P-22 4x2 Pumper Truck has the same fire fighting capability as the P-24, but is used in urban areas.
- -- The P-23 Crash Truck is a larger version of the P-19 ARFF truck and has a larger fire suppression capacity. It is primarily assigned at transport, bomber, depot, and cargo aircraft bases.
- -- The P-26 Water Tanker Truck is a 4000-gallon resupply truck used to support the ARFF vehicles, fight wild land fires, and provide mutual assistance to communities.
- -- The P-29 Wild Land Firefighting Truck is a four-person crew cab truck which contains a modular agent and pump and roll delivery system as well as firefighting tools and equipment. This truck is outfitted with a Compressed Air Foam System (CAFS) and has a 500 gallon water tank. The truck is intended to combat wild land and brush type fires.

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                |                                    | <b>Date</b> : May 2017 |
|--|------------------------------------|------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:                         | P-1 Line Item Number / Title:      |                        |
| 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 4: Fire | 824010 / FIRE FIGHTING/CRASH RESCU | JE VEHICLES            |
| Fighting Equipment   |                                    |                        |

ID Code (A=Service Ready), B=Not Service Ready): A Program Elements for Code B Items: N/A Other Related Program Elements: 0202834F, 0901279F

Line Item MDAP/MAIS Code: N/A

- -- The P-30 is a Medium Rescue Vehicle. It is designed to bring equipment, lighting, a winch, and a generator to the scene of a rescue event. This vehicle has 450 cubic feet of storage space and affords easy equipment access and improved storage compartments. This truck is assigned to the larger industrial bases.
- -- The P-31 Hazardous Material Vehicle is a dual purpose vehicle that stows and transports hazardous material response equipment for the purpose of mitigating chemical leaks, spills, and releases. This vehicle also provides an incident command workstation area for the purpose of research, command, control, and communications during containment/cleanup operations.
- -- The P-33 Quint Truck is a fire fighting truck with a 75 foot aerial ladder. It provides improved agent delivery over older models as well as the capability to provide elevated delivery of agent involving high rise and warehouse facilities.
- -- The P-34 is a first response Air Rescue and Fire Fighting (ARFF) vehicle which equips forces with initial "knock down" capability. The P-34 is the first fire truck to employ Ultra High Pressure (UHP) technology which allows the vehicle to discharge a mixture of water and foam at 1350 psi. This UHP technology makes the vehicle three times more effective than a conventional ARFF truck. The truck has a 400 gallon water tank and a 50 gallon foam tank along with a bumper turret and 200 feet of hand line all mounted on an F-550 chassis.
- -- The Rapid Intervention Vehicle (RIV) is a first response aircraft fire truck; it is the newest addition to the Air Force's fleet of crash response vehicles. The RIV is the first vehicle in the AF to use new Ultra High Pressure (UHP) fire fighting technology which makes this truck 3 to 3.5 times more efficient at knock-down than conventional ARFF vehicles. This feature increases the length of time the vehicle can remain on the scene without having to be resupplied. Perched on an F550 chassis, the RIV is equipped with a 4-wheel drive train; it provides seating for four, equips fire fighters with limited storage for rescue equipment; has a bumper turret, a 200 ft hand line and a winch. Because of its size, speed and agility this truck can get to a crash scene quickly and perform fire fighting operations until the larger trucks can arrive at the scene.

These vehicles are all built to meet the performance standards of the National Fire Protection Association (NFPA), Occupational Safety and Health Administration (OSHA), Federal Aviation Administration (FAA), and Air Force safety regulations.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PE 0202834F, 0702831, 0901279F.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 4: Fire

824010 / FIRE FIGHTING/CRASH RESCUE VEHICLES

Fighting Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: 0202834F, 0901279F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule                   |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|-------------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                              | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | FIRE FIGHTING/CRASH RESCUE VEHICLES |             |          |                       | - / -                                    | - / 10.419                               | - / 155.041                              | - / 14.768                               | - / 22.583                               | - / 37.351                               |
| P-40            | Total Gross/Weapon System Cost      |             |          |                       | - 1 -                                    | - / 10.419                               | - / 155.041                              | - / 14.768                               | - / 22.583                               | - / 37.351                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 procurement dollars in the amount of \$14.768M will procure, but is not limited to, 29 vehicles in support of installation and unit mission requirements for Air Force personnel.

FY18 OCO dollars in the amount of \$22.583M will procure, but is not limited to, 38 vehicles in support of Overseas Contingency Operations.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 4

P-1 Line Item Number / Title:

824010 / FIRE FIGHTING/CRASH RESCUE VEHICLES

Aggregated Items Title:
FIRE FIGHTING/CRASH RESCUE
VEHICLES

|   |          |                       | P         | rior Year     | s                       |            | FY 2016       |                         |            | FY 2017       |                         | F۱         | / 2018 Ba         | se                      | FY         | 2018 OC       | 0                       | FY         | 2018 Tot      | ıal                     |
|---|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|-------------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Jncategorized   |          |                       |           |               |                         |            |               |                         | ·          |               |                         |            |                   | '                       |            |               |                         |            |               |                         |
| TRUCK, AERIAL P-21<br>4210-01-057-0696                                | Α        |                       | -         | -             | -                       | 844,005.00 | 1             | 0.844                   | 834,936.00 | 3             | 2.505                   | -          | -                 | -                       | -          | -             | -                       | -          | -             | -                       |
| TRUCK, PUMPER<br>4X2 P-22<br>4210-00-224-4564 <sup>(1)</sup>          | Α        |                       | -         | -             | -                       | 405,143.00 | 2             | 0.810                   | 419,000.00 | 28            | 11.732                  | 438,417.00 | 3                 | 1.315                   | -          | -             | 0.877                   | 730,695.00 | 3             | 2.1                     |
| TRUCK, PUMPER<br>4X4 P-24<br>4210-00-233-1538 <sup>(2)</sup>          | Α        |                       | -         | -             | -                       | 481,520.00 | 1             | 0.482                   | 451,120.00 | 37            | 16.691                  | 489,102.00 | 2                 | 0.978                   | 489,102.00 | 4             | 1.956                   | 489,102.00 | 6             | 2.9                     |
| TRK FIRE<br>CRS STRIKER<br>4210-00-702-6801                           | Α        |                       | -         | -             | -                       | -          | -             | -                       | 875,750.00 | 2             | 1.752                   | -          | -                 | -                       | -          | -             | -                       | -          | -             |                         |
| TRUCK, WATER<br>TANKER P-26<br>4210-01-356-4907 <sup>(3)</sup>        | Α        |                       | -         | -             | -                       | 277,684.00 | 7             | 1.944                   | 306,500.00 | 33            | 10.115                  | 308,442.00 | 6                 | 1.851                   | 308,442.00 | 5             | 1.542                   | 308,442.00 | 11            | 3.3                     |
| VEHICLE, MEDIUM<br>RESCUE P-30<br>4210-01-452-5121                    | Α        |                       | -         | -             | -                       | -          | -             | -                       | 255,070.00 | 13            | 3.316                   | -          | -                 | -                       | -          | -             | -                       | -          | -             |                         |
| TRUCK, QUINT P-33<br>4210-01-500-1083 <sup>(4)</sup>                  | Α        |                       | -         | -             | -                       | -          | -             | -                       | 618,770.00 | 16            | 9.900                   | 628,794.00 | 1                 | 0.629                   | -          | -             | -                       | 628,794.00 | 1             | 0.6                     |
| TRUCK,<br>WILDLAND P-29<br>4210-01-483-1025                           | Α        |                       | -         | -             | -                       | -          | -             | -                       | 340,143.00 | 12            | 4.082                   | -          | -                 | -                       | 405,257.00 | 1             | 0.405                   | 405,257.00 | 1             | 0.4                     |
| TRUCK, HEAVY<br>RESCUE P-28<br>4210-01-369-6048 <sup>(5)</sup>        | Α        |                       | -         | -             | -                       | -          | -             | -                       | 460,333.00 | 5             | 2.302                   | -          | -                 | -                       | -          | -             | -                       | -          | -             |                         |
| TRUCK, QUICK<br>ATTACK P-34<br>4210-01-553-4534                       | Α        |                       | -         | -             | -                       | -          | -             | -                       | 203,470.00 | 14            | 2.849                   | -          | -                 | -                       | 341,417.00 | 1             | 0.341                   | 341,417.00 | 1             | 0.3                     |
| TRUCK, HAZMAT<br>FIRE FIGHTING P31<br>4210-01-396-5219 <sup>(6)</sup> | А        |                       | -         | -             | -                       | -          | -             | -                       | 461,292.00 | 35            | 16.145                  | 478,355.00 | 3                 | 1.435                   | -          | -             | -                       | 478,355.00 | 3             | 1.4                     |
| TRUCK, ARFF<br>P19UHP<br>4210-01-608-7285 <sup>(7)</sup>              | Α        |                       | -         | -             | -                       | 613,882.00 | 5             | 3.069                   | 620,179.00 | 58            | 35.970                  | 627,536.00 | 7                 | 4.393                   | 627,536.00 | 19            | 11.923                  | 627,536.00 | 26            | 16.3                    |
| TRK FIRE P23<br>4210-01-625-9765                                      | Α        |                       | -         | -             | -                       | -          | -             | -                       | 658,032.00 | 5             | 3.290                   | -          | -                 | -                       | -          | -             | -                       | -          | -             |                         |
| TRUCK, ARFF<br>P23UHP<br>4210-01-608-7287 <sup>(8)</sup>              | Α        |                       | -         | -             | -                       | 648,085.00 | 5             | 3.240                   | 674,000.00 | 51            | 34.374                  | 692,176.00 | 6                 | 4.153                   | 692,176.00 | 8             | 5.537                   | 692,176.00 | 14            | 9.6                     |
| PMA OTHER<br>GOVERNMENT<br>COSTS                                      | Α        |                       | -         | -             | -                       | -          | -             | 0.030                   | 19,000.00  | 1             | 0.019                   | 14,300.00  | 1                 | 0.014                   | -          | -             | 0.000                   | 14,300.00  | 1             | 0.0                     |

LI 824010 - FIRE FIGHTING/CRASH RESCUE VEHICLES Air Force

UNCLASSIFIED
Page 4 of 5

P-1 Line #7

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 02 / 4

P-1 Line Item Number / Title:
824010 / FIRE FIGHTING/CRASH RESCUE VEHICLES

Aggregated Items Title:
FIRE FIGHTING/CRASH RESCUE VEHICLES

VEHICLES

|                                |          |                       | Р         | rior Years    | 3                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | F۱        | / 2018 OC     | 0                       | F١        | ′ 2018 Tot    | tal                     |
|--------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Subtotal: Uncategorized        |          |                       | -         | -             | -                       | -         | -             | 10.419                  | -         | -             | 155.041                 | -         | -             | 14.768                  | -         | -             | 22.583                  | -         | -             | 37.351                  |
| Total                          |          |                       | -         | -             | -                       | -         | -             | 10.419                  | -         | -             | 155.041                 | -         | -             | 14.768                  | -         | -             | 22.583                  | -         | -             | 37.351                  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks

Based on AF Mission changes and/or AF Mission priorities, NSNs and/or quantities may change during year of execution.

Unit Costs for FY18 are subject to change.

PMA Justification

PROGRAM MANAGEMENT ADMINISTRATION (PMA): PMA supports the operation of the program office in its management and oversight role via travel, procurement of supplies and Advisory and Administrative Services (A&AS).

#### Footnotes:

- (1) FY17 16 EA OCO FUNDS \$6.704M
- (2) FY17 17 EA OCO FUNDS \$7.669M
- (3) FY17 4 EA OCO FUNDS \$1.226M
- (4) FY17 13EA OCO FUNDS \$8.044M
- (5) FY17 1 EA OCO FUNDS \$0.460M
- <sup>(6)</sup> FY17 11 EA OCO FUNDS \$5.074M
- (7) FY17 15 EA OCO FUNDS \$9.303M
- (8) FY17 15 EA OCO FUNDS \$10.110M



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 5:

825990 / Materials Handling Vehicles

Materials Handling Equipment

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #8

Line Item MDAP/MAIS Code: N/A

|   | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
|---|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                              | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 24.160           | 118.480           | 13.561           | 5.353            | 18.914         | 15.257          | 20.080        | 21.830  | 22.059  | -        | 240.780 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -            | 24.160           | 118.480           | 13.561           | 5.353            | 18.914         | 15.257          | 20.080        | 21.830  | 22.059  | -        | 240.780 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -            | 24.160           | 118.480           | 13.561           | 5.353            | 18.914         | 15.257          | 20.080        | 21.830  | 22.059  | -        | 240.780 |
| (The following                                | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)               | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | - [      | _       |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                 | -                | -                | =              | -               | -             | -       | -       | -        | -       |

## **Description:**

Air Force

FY17 funding totals include \$2.366M appropriated for Overseas Contingency Operations.

This program includes various material handling vehicles with an individual item procurement value of less than \$5M. These vehicles consist of Forklifts, Container Handlers, Baggage Conveyors, Warehouse Tugs and Warehouse Cranes critical to Depot and Base Supply Operations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for these exhibits contained in PEs: 0202834F, 0207597F, 0208028F, 0401221F, 0502834F, 0702831F.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 152     | 1,129   | 116             | 48             | 164              | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 23.701  | 115.663 | 11.167          | 5.353          | 16.520           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG                   | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 8       | 31      | 30              | 0              | 30               | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.459   | 2.817   | 2.394           | 0.000          | 2.394            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 160     | 1,160   | 146             | 48             | 194              | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 24.160  | 118.480 | 13.561          | 5.353          | 18.914           | 0.000   | 0.000   | 0.000   | 0.000   |

LI 825990 - Materials Handling Vehicles Page 1 of 2

|  | UNC  | LASSIFIED                            |  |  |
|--|--|--------------------------------------|--|--|
| Exhibit P-40, Budget Line Item Justification:  | FY 2018 Air Force                              |                                      | <b>Date</b> : May 2017                             |  |
| Appropriation / Budget Activity / Budget Sul<br>3080F: Other Procurement, Air Force / BA 02: \<br>Materials Handling Equipment |  | P-1 Line Item Nu<br>825990 / Materia | umber / Title:<br>ls Handling Vehicles             |  |
| D Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code                      | B Items: N/A                         | Other Related Program Elements: N/A                |  |
| Line Item MDAP/MAIS Code: N/A  |  |                                      |  |  |
| Justification: FY18 procurement dollars in the amount of \$13.561M will  | procure, but is not limited to 146 vehicles in | support of installation and          | unit mission requirements for Air Force personnel. |  |
| FY18 OCO dollars in the amount of \$5.353M will procure,   | but is not limited to, 48 vehicles in support  | of Overseas Contingency (            | Operations.  |  |
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LI 825990 - Materials Handling Vehicles Air Force

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 6: Base

826210 / Runway Snow Remov & Cleaning Equip

Maintenance Support

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Line item widar/iwais code. N/A               |                |                  |                    |                  |                  |                  |                 |                |         |         |                |         |
|---|----------------|------------------|--------------------|------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|---------|
| Resource Summary                              | Prior<br>Years | FY 2016          | FY 2017            | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total   |
|   |                |                  |                    |                  |                  |                  |                 |                |         |         | Complete       |         |
| Procurement Quantity (Units in Each)          | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -              | 6.855            | 78.778             | 3.429            | 11.315           | 14.744           | 2.870           | 2.863          | 2.916   | 2.970   | -              | 111.996 |
| Less PY Advance Procurement (\$ in Millions)  | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Net Procurement (P-1) (\$ in Millions)        | -              | 6.855            | 78.778             | 3.429            | 11.315           | 14.744           | 2.870           | 2.863          | 2.916   | 2.970   | -              | 111.996 |
| Plus CY Advance Procurement (\$ in Millions)  | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Total Obligation Authority (\$ in Millions)   | -              | 6.855            | 78.778             | 3.429            | 11.315           | 14.744           | 2.870           | 2.863          | 2.916   | 2.970   | -              | 111.996 |
| (The following                                | Resource Sum   | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |         |         |                |         |
| Initial Spares (\$ in Millions)               | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |

### **Description:**

This program procures snow removal vehicles and commercial sweepers used on all airfield surfaces to remove snow and help prevent foreign object damage (FOD) to aircraft engines and tires. Snow removal equipment includes front mounted brooms, multi-purpose blowers, and plows. These vehicles provide critical mission support to airfield operations because fighter aircraft cannot land or take off with ice on the runway. Multi-purpose vacuum sweepers maintain airfields, roads, and grounds. Vacuum sweepers provide equally important support at all air bases due to the high cost of FOD and the potential for loss in FOD-related engine accidents.

These assets are critical to the Air Force mission. They are the primary equipment used for snow, ice, and debris removal from runways and taxiways year round. The vital functions of these vehicles prevent the closing of airfields due to debris and/or snow and ice buildup.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PEs: 0202834F, 0208028F, 0502834F, 0502844F, 0702831F.

|        | Secondary Distribution     | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|--------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF     | Quantity                   | 30      | 28      | 12              | 47             | 59               | 0       | 0       | 0       | 0       |
|        | Total Obligation Authority | 5.981   | 8.364   | 3.051           | 11.315         | 14.366           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG   | Quantity                   | 5       | 2       | 1               | 0              | 1                | 0       | 0       | 0       | 0       |
|        | Total Obligation Authority | 0.874   | 0.340   | 0.303           | 0.000          | 0.303            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR    | Quantity                   | 0       | 1       | 1               | 0              | 1                | 0       | 0       | 0       | 0       |
|        | Total Obligation Authority | 0.000   | 0.074   | 0.075           | 0.000          | 0.075            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total: | Quantity                   | 35      | 31      | 14              | 47             | 61               | 0       | 0       | 0       | 0       |

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 6: Base

826210 / Runway Snow Remov & Cleaning Equip

Maintenance Support

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| 0                      | - Distribution             | EV 0046 | EV 0047 | FY 2018 | FY 2018 | FY 2018 | EV 0040 | EV 0000 | FV 0004 | EV 0000 |
|------------------------|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Secondar               | y Distribution             | FY 2016 | FY 2017 | Base    | oco     | Total   | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
| Secondary Distribution | Total Obligation Authority | 6.855   | 8.778   | 3.429   | 11.315  | 14.744  | 0.000   | 0.000   | 0.000   | 0.000   |

#### Justification:

FY18 procurement dollars in the amount of \$3.429M procures, but is not limited to, 14 vehicles in support of installation and unit mission requirements for Air Force Personnel.

FY18 OCO dollars in the amount of \$11.315M will procure, but is not limited to, 47 vehicles in support of Overseas Contingency Operations.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 6: Base

Maintenance Support

P-1 Line Item Number / Title:

826990 / Base Maintenance Support Vehicles

Program Elements for Code B Items: N/A Other Related Program Elements: N/A ID Code (A=Service Ready, B=Not Service Ready): A

Line Item MDAP/MAIS Code: N/A

| Line item waar /walo code: N/A                | 1              | 1                |                    | T                 | 1                | T                | r               |               | r       | T       |          |         |
|---|----------------|------------------|--------------------|-------------------|------------------|------------------|-----------------|---------------|---------|---------|----------|---------|
|   | Prior          |                  |                    | FY 2018           | FY 2018          | FY 2018          |                 |               |         |         | То       |         |
| Resource Summary                              | Years          | FY 2016          | FY 2017            | Base              | oco              | Total            | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -              | -                | -                  | -                 | -                | -                | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -              | 92.581           | 180.275            | 60.075            | 40.451           | 100.526          | 55.673          | 61.532        | 62.633  | 64.020  | -        | 617.240 |
| Less PY Advance Procurement (\$ in Millions)  | -              | -                | -                  | -                 | -                | -                | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -              | 92.581           | 180.275            | 60.075            | 40.451           | 100.526          | 55.673          | 61.532        | 62.633  | 64.020  | -        | 617.240 |
| Plus CY Advance Procurement (\$ in Millions)  | -              | -                | -                  | -                 | -                | -                | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -              | 92.581           | 180.275            | 60.075            | 40.451           | 100.526          | 55.673          | 61.532        | 62.633  | 64.020  | -        | 617.240 |
| (The following                                | g Resource Sum | mary rows are fo | or informational p | ourposes only. Th | ne corresponding | p budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)               | -              | -                | -                  | -                 | -                | -                | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -              | -                | -                  | -                 | -                | -                | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -              | -                | -                  | -                 | -                | -                | -               | -             | -       | -       | -        | -       |

### **Description:**

This vehicle group consist of maintenance/test vans, water distribution trucks and heavy construction equipment (dozers, large cranes, large dump trucks, rock crushers, motorized scrapers, well-drilling vehicles, compactors, wheel loaders, graders, cement mixers, paving machines, excavators, sewer trucks, refuse trucks, trenches and backhoes). The assets are critical to the Air Force mission and are crucial to keeping many sortie generation/sortie sustainment missions supported and operational. The types of items contained in this P-1 line are critical (deployed) assets used in direct support of Air Force units engaged in contingency operations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PEs: 0202834F. 0207597. 0208028F. 0401221F. 0502834F. 0502844F. 0702831F.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 624     | 956     | 321             | 135            | 456              | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 82.774  | 177.544 | 57.751          | 40.451         | 98.201           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG                   | Quantity                   | 22      | 11      | 19              | 0              | 19               | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 5.980   | 2.402   | 2.043           | 0.000          | 2.043            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 30      | 4       | 4               | 0              | 4                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 3.827   | 0.329   | 0.281           | 0.000          | 0.281            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 676     | 971     | 344             | 135            | 479              | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 92.581  | 180.275 | 60.075          | 40.451         | 100.526          | 0.000   | 0.000   | 0.000   | 0.000   |

UNCLASSIFIED Page 1 of 14

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 6: Base

826990 / Base Maintenance Support Vehicles

Maintenance Support

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule                 |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|-----------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                            | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Base Maintenance Support Vehicles |             |          |                       | - / -                                    | - / 92.581                               | - / 180.275                              | - / 60.075                               | - / 40.451                               | - / 100.526                              |
| P-40            | Total Gross/Weapon System Cost    |             |          |                       | - 1 -                                    | - / 92.581                               | - / 180.275                              | - / 60.075                               | - / 40.451                               | - / 100.526                              |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 Procurement dollars in the amount of \$60.075M will procure but not limited to 344 vehicles in support of installation and unit mission requirements for Air Force personnel.

FY18 OCO dollars in the amount of \$40.451M will procure, but is not limited to, 135 vehicles in support of Overseas Contingency Operations.

UNCLASSIFIED
Page 2 of 14

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

826990 / Base Maintenance Support Vehicles

Base Maintenance Support Vehicles

| 3080F / 02 / 6  |          |                       |           |               |                         |            | 8             | 26990 <i>1</i>          | Base Ma    | aintenar      | ice Supp                | port ven   | icies         |                         | B          | ase Mair      | itenanc                 | e Suppor   | t venicie     | es                      |
|---|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|
|   |          |                       | F         | Prior Years   | s                       |            | FY 2016       |                         |            | FY 2017       |                         | F          | Y 2018 Bas    | se                      | FY         | / 2018 OC     | 0                       | FY         | 2018 Tot      | :al                     |
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Jncategorized   |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| USAFE ERI<br>OCO FUNDING<br>PLACEHOLDER.<br>FUNDS BEING<br>MOVED TO BPAC<br>5990. | A        |                       | -         | -             | -                       | 1,200K     | 4             | 4.800                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |          |                       |           | -             | -                       |            | 4             | 4.800                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| DUMP TRUCK,<br>6X4, 64k GVW<br>(2320-01-524-6043)                                 | Α        |                       | -         | -             | -                       | -          | -             | -                       | 163,683.00 | 6             | 0.982                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution  |          |                       |           |               | ,                       | ,          |               |                         |            |               |                         |            |               |                         |            |               |                         |            | *             |                         |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 6             | 0.982                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| BATCHING PLANT<br>(3895-01-063-2722)  | Α        |                       | -         | -             | -                       | 1,192K     | 1             | 1.192                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution  |          |                       |           |               | ,                       |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AFNG  |          |                       |           | -             | -                       |            | 1             | 1.192                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| TRNHR FRA MTD<br>(3805-01-068-4303)   | Α        |                       | -         | -             | -                       | 111,709.00 | 1             | 0.112                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |          |                       |           | -             | -                       |            | 1             | 0.112                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| TRENCHER 45HP<br>(3805-01-395-2699)   | Α        |                       | -         | -             | -                       | 110,950.00 | 1             | 0.111                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |          |                       |           | -             | -                       |            | 1             | 0.111                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| MKR TRAFFIC<br>(3825-00-542-2515)   | Α        |                       | -         | -             | -                       | -          | -             | -                       | 310,000.00 | 3             | 0.930                   | 311,000.00 | 4             | 1.244                   | 311,000.00 | 6             | 1.866                   | 311,000.00 | 10            | 3.1                     |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 3             | 0.930                   |            | 4             | 1.244                   |            | 6             | 1.866                   |            | 10            | 3.1                     |
| TRAC WHLD<br>IND 4WD<br>(2420-01-205-8579)  | Α        |                       | -         | -             | -                       | 86,248.00  | 17            | 1.466                   | 53,312.00  | 12            | 0.640                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |          |                       |           | -             | -                       |            | 12            | 1.035                   |            | 12            | 0.640                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| AFNG  |          |                       |           | -             | -                       |            | 5             | 0.431                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| TRAC FTRACD SZT4<br>(2410-00-166-4176)  | Α        |                       | -         | -             | -                       | -          | -             | -                       | 118,239.00 | 5             | 0.591                   | 119,000.00 | 8             | 0.952                   | 119,000.00 | 6             | 0.714                   | 119,000.00 | 14            | 1.6                     |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 5             | 0.591                   |            | 8             | 0.952                   |            | 6             | 0.714                   |            | 14            | 1.6                     |
| 25T R TERRAIN<br>(3810-01-479-9745)   | Α        |                       | -         | -             | -                       | 324,764.00 | 2             | 0.650                   | 375,000.00 | 11            | 4.125                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 02 / 6

826990 / Base Maintenance Support Vehicles

**Aggregated Items Title:**Base Maintenance Support Vehicles

|  |          |                       |           |                      |                         | 1          |               |                         |            |                      |                         | port Veni  |               |                         |            |               |                         |            |                      | es                   |
|--|----------|-----------------------|-----------|----------------------|-------------------------|------------|---------------|-------------------------|------------|----------------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|----------------------|----------------------|
|  |          |                       | P         | rior Year            | S                       |            | FY 2016       |                         |            | FY 2017              |                         | FY         | ' 2018 Bas    | e                       | FY         | 2018 OC       | 0                       | FY         | 2018 Tot             | .al                  |
| Item Number /<br>Title [DODIC]                   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Tota<br>Cos<br>(\$ A |
| Secondary Distribution                           | 1        |                       |           |                      |                         |            |               |                         |            |                      |                         |            | ,             |                         |            |               |                         |            |                      |                      |
| AF   |          |                       |           | -                    | -                       |            | 2             | 0.650                   |            | 11                   | 4.125                   |            | -             | -                       |            | -             | -                       |            | -                    |                      |
| FRONT HOIST<br>REF TRK<br>(2320-01-470-6102)     | А        |                       | -         | -                    | -                       | -          | -             | -                       | 208,124.00 | 2                    | 0.416                   | 209,000.00 | 1             | 0.209                   | 209,000.00 | 5             | 1.045                   | 209,000.00 | 6                    |                      |
| Secondary Distribution                           | 7        |                       |           |                      |                         |            |               |                         |            |                      |                         |            |               |                         |            | ļ             |                         |            |                      |                      |
| AF   |          |                       |           | -                    | -                       |            | -             | -                       |            | 2                    | 0.416                   |            | 1             | 0.209                   |            | 5             | 1.045                   |            | 6                    |                      |
| SCOOP LOADER<br>(3805-00-260-1967)               | А        |                       | -         | -                    | -                       | 145,452.00 | 2             | 0.291                   | 148,527.00 | 10                   | 1.485                   | 149,000.00 | 7             |                         | 149,000.00 | 4             | 0.596                   | 149,000.00 | 11                   |                      |
| Secondary Distribution                           | 1        |                       |           |                      |                         |            |               |                         |            |                      |                         |            |               |                         |            |               |                         |            |                      |                      |
| AF   |          |                       |           | -                    | -                       |            | 2             | 0.291                   |            | 10                   | 1.485                   |            | 6             | 0.894                   |            | 4             | 0.596                   |            | 10                   |                      |
| AFNG   |          |                       |           | -                    | -                       |            | -             | -                       |            | -                    | -                       |            | 1             | 0.149                   |            | -             | -                       |            | 1                    |                      |
| TRK DP<br>24000-33000G 4X2<br>(2320-00-833-6117) | A        |                       | -         | -                    | -                       | 79,529.00  | 48            | 3.817                   | 81,599.00  | 15                   | 1.224                   | 82,000.00  | 24            | 1.968                   | 82,000.00  | 3             | 0.246                   | 82,000.00  | 27                   |                      |
| Secondary Distribution                           | 1        |                       |           |                      |                         | •          |               |                         |            | ·                    |                         |            |               |                         |            |               |                         |            |                      |                      |
| AF   |          |                       |           | -                    | -                       |            | 47            | 3.738                   |            | 15                   | 1.224                   |            | 13            | 1.066                   |            | 3             | 0.246                   |            | 16                   |                      |
| AFNG   |          |                       |           | -                    | -                       |            | -             | -                       |            | -                    | -                       |            | 8             | 0.656                   |            | -             | -                       |            | 8                    |                      |
| AFR  |          |                       |           | -                    | -                       |            | 1             | 0.080                   |            | -                    | -                       |            | 3             | 0.246                   |            | -             | -                       |            | 3                    | l                    |
| 8.5T CRANE<br>(3810-01-538-4647)                 | A        |                       | -         | -                    | -                       | -          | -             | -                       | 145,974.00 | 3                    | 0.438                   | -          | -             | -                       | -          | -             | -                       | -          | -                    |                      |
| Secondary Distributior                           | 1        |                       |           |                      |                         |            |               |                         |            |                      |                         |            |               |                         |            |               |                         |            |                      |                      |
| AF   |          |                       |           | -                    | -                       |            | -             | -                       |            | 3                    | 0.438                   |            | -             | -                       |            | -             | -                       |            | -                    |                      |
| CARRIER<br>CARGO 4PAX<br>(2350-01-615-0415)      | A        |                       | -         | -                    | -                       | 162,775.00 | 2             | 0.326                   | 164,760.00 | 3                    | 0.494                   | -          | -             | -                       | -          | -             | -                       | -          | -                    |                      |
| Secondary Distribution                           | 1        |                       |           |                      |                         |            | ,             |                         |            |                      |                         |            | ,             |                         | ,          | ,             |                         | ,          |                      |                      |
| AF   |          |                       |           | -                    | -                       |            | 2             | 0.326                   |            | 3                    | 0.494                   |            | -             | -                       |            | -             | -                       |            | -                    |                      |
| DUMP TRK W/<br>SNOWPLOW<br>(2320-01-206-9156)    | A        |                       | -         | -                    | -                       | -          | -             | -                       | 136,568.00 | 3                    | 0.410                   | -          | -             | -                       | -          | -             | -                       | -          | -                    |                      |
| Secondary Distribution                           | 1        |                       |           |                      |                         |            |               |                         |            |                      |                         |            |               |                         |            |               |                         |            |                      |                      |
| AF   |          |                       |           | -                    | -                       |            | -             | -                       |            | 3                    | 0.410                   |            | -             | -                       |            | -             | -                       |            | -                    | Į                    |
| TON DUMP TRUCK<br>2320-00-706-5348)              | ( A      |                       | -         | -                    | -                       | 113,078.00 | 2             | 0.226                   | 107,531.00 | 6                    | 0.645                   | -          | -             | -                       | -          | -             | -                       | -          | -                    |                      |
| Secondary Distribution                           | 1        |                       |           |                      |                         |            |               |                         |            |                      |                         |            |               |                         |            |               |                         |            |                      | ,                    |
| AF   |          |                       |           | -                    | -                       |            | 1             | 0.113                   |            | 5                    | 0.538                   |            | -             | -                       |            | -             | -                       |            | -                    |                      |
| AFNG   | $\perp$  |                       |           | -                    | -                       |            | 1             | 0.113                   |            | -                    | -                       |            | -             | -                       |            | -             | -                       |            | -                    | -                    |
| AFR  |          |                       |           | -                    | -                       |            | -             | _                       |            | 1                    | 0.108                   |            | -             | _                       |            | -             | _                       |            | -                    | ı                    |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6

P-1 Line Item Number / Title:

826990 / Rase Maintenance Sunnort Vehicles

Aggregated Items Title: Base Maintenance Support Vehicles

| 180F / 02 / 6   |          |                       |           |               |                         |            |               | 200007                  | Base Ma    | anneman       | oc oap                  | 7011       | 0.00          |                         |            | acc man       | itoriario               | e Suppor   | t v Ci iioit  |             |
|---|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------|
|   |          |                       | P         | rior Years    | s                       |            | FY 2016       |                         |            | FY 2017       |                         | FY         | 2018 Bas      | e                       | F          | 2018 OC       | 0                       | FY         | 2018 Tota     | al          |
| Item Number /<br>Title [DODIC]                                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Tota<br>Cos |
| 2.5 CY SCOOP<br>LOADER FT<br>(3805-00-728-9718)                   | А        |                       | -         | -             | -                       | -          | -             | -                       | 251,022.00 | 2             | 0.502                   | 252,000.00 | 11            | 2.772                   | 252,000.00 | 8             | 2.016                   | 252,000.00 | 19            | 4.          |
| Secondary Distribution  |          |                       |           |               | ,                       |            |               |                         |            | ·             |                         |            |               |                         |            | •             |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 2             | 0.502                   |            | 11            | 2.772                   |            | 8             | 2.016                   |            | 19            | 4           |
| EXCAVATOR DIESEL<br>ENGINE DRIVEN PT<br>(3805-01-106-7176)<br>(1) | A        |                       | -         | -             | -                       | 229,850.00 | 27            | 6.206                   | 239,849.00 | 45            | 10.793                  | 108,200.00 | 2             | 0.216                   | 108,200.00 | 5             | 0.541                   | 108,200.00 | 7             | 0           |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |            | 27            | 6.206                   |            | 45            | 10.793                  |            | 2             | 0.216                   |            | 5             | 0.541                   |            | 7             | (           |
| WHEELED<br>DITCHING MACHINE<br>(3805-01-032-9974)                 | A        |                       | -         | -             | -                       | -          | -             | -                       | 197,205.00 | 20            | 3.944                   | -          | -             | -                       | -          | -             | -                       | -          | -             |             |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 20            | 3.944                   |            | -             | -                       |            | -             | -                       |            | -             |             |
| 1.5 CY SCOOP<br>LDR W/Q CPLR<br>(3805-01-074-8111)                | Α        |                       | -         | -             | -                       | 115,595.00 | 19            | 2.196                   | 125,326.00 | 7             | 0.877                   | 126,000.00 | 30            | 3.780                   | 126,000.00 | 5             | 0.630                   | 126,000.00 | 35            |             |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |            | 14            | 1.618                   |            | 6             | 0.752                   |            | 23            | 2.898                   |            | 5             | 0.630                   |            | 28            |             |
| AFNG  |          |                       |           | -             | -                       |            | 4             | 0.462                   |            | -             | -                       |            | 7             | 0.882                   |            | -             | -                       |            | 7             |             |
| AFR   |          |                       |           | -             | -                       |            | 1             | 0.116                   |            | 1             | 0.125                   |            | -             | -                       |            | -             | -                       |            | -             |             |
| 4 CY SCOOP LDR PT<br>(3805-01-075-1816)<br>(2)                    | А        |                       | -         | -             | -                       | 224,400.00 | 23            | 5.161                   | 228,930.00 | 75            | 17.170                  | -          | -             | -                       | -          | -             | -                       | -          | -             |             |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |            | 23            | 5.161                   |            | 75            | 17.170                  |            | -             | -                       |            | -             | -                       |            | -             |             |
| SCOOP LDR<br>N/BKHOE<br>3805-00-148-2169)                         | А        |                       | -         | -             | -                       | 78,989.00  | 4             | 0.316                   | 82,952.00  | 57            | 4.728                   | 83,500.00  | 20            | 1.670                   | 83,500.00  | 3             | 0.251                   | 83,500.00  | 23            |             |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |            | 3             | 0.237                   |            | 57            | 4.728                   |            | 20            | 1.670                   |            | 3             | 0.251                   |            | 23            |             |
| AFNG  |          |                       |           | -             | -                       |            | 1             | 0.079                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |             |
| SCOOP LOADER,<br>SKID STEER 1CY<br>3805-01-257-5636)              | A        |                       | -         | -             | -                       | 50,272.00  | 4             | 0.201                   | 119,172.00 | 27            | 3.218                   | -          | -             | -                       | -          | -             | -                       | -          | -             |             |
| Secondary Distribution  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |            | 4             | 0.201                   |            | 27            | 3.218                   |            | -             | -                       |            | -             | -                       |            | -             |             |
| DISTR BIT TRK MTD<br>(3895-00-352-8105)                           | Α        |                       | -         | -             | -                       | 169,497.00 | 1             | 0.169                   | 169,497.00 | 2             | 0.339                   | 170,273.00 | 17            | 2.895                   | 170,273.00 | 6             | 1.022                   | 170,273.00 | 23            |             |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:

| 080F / 02 / 6                                     |          |                       |           |               |                         | 1          |               | 1                       |            | ,             |                         | ort Vehi   |               |                         |            |               |                         | Suppor     |               |               |
|---|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|---------------|
|   |          |                       | P         | rior Years    | S                       |            | FY 2016       |                         |            | FY 2017       |                         | FY         | 2018 Bas      | е                       | FY         | 2018 OC       | 0                       | FY         | 2018 Tota     | al            |
| Item Number /<br>Title [DODIC]                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost |
| AF  |          |                       |           | -             | -                       |            | 1             | 0.169                   | . ,        | 2             | 0.339                   | . ,        | 17            | 2.895                   | . ,        | 6             | 1.022                   | .,         | 23            | 3.9           |
| PAVING MACH BITU<br>(3895-01-057-5288)            | Α        |                       | -         | -             | -                       | 315,349.00 | 3             | 0.946                   | -          | -             | -                       | 334,000.00 | 2             | 0.668                   | 334,000.00 | 4             | 1.336                   | 334,000.00 | 6             | 2.0           |
| Secondary Distribution                            | ,        |                       | l         |               |                         |            |               |                         |            | Į.            |                         |            |               |                         |            |               |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 2             | 0.631                   |            | -             | -                       |            | 2             | 0.668                   |            | 4             | 1.336                   |            | 6             | 2.0           |
| AFNG  |          |                       |           | -             | -                       |            | 1             | 0.315                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |               |
| ROLLER MOT<br>PT SP 15T<br>(3895-00-078-5898)     | A        |                       | -         | -             | -                       | 71,292.00  | 23            | 1.640                   | 86,722.00  | 7             | 0.607                   | 88,000.00  | 8             | 0.704                   | 88,000.00  | 6             | 0.528                   | 88,000.00  | 14            | 1.2           |
| Secondary Distribution                            | ,        |                       |           |               |                         | ,          |               |                         |            |               |                         |            |               |                         |            |               |                         |            | ,             |               |
| AF  |          |                       |           | -             | -                       |            | 23            | 1.640                   |            | 7             | 0.607                   |            | 7             | 0.616                   |            | 6             | 0.528                   |            | 13            | 1.1           |
| AFNG  |          |                       |           | -             | -                       |            | -             | -                       |            | -             | -                       |            | 1             | 0.088                   |            | -             | -                       |            | 1             | 0.0           |
| RLR RD TAND 2RL<br>(3895-00-243-6797)             | А        |                       | -         | -             | -                       | 35,863.00  | 1             | 0.036                   | 35,200.00  | 4             | 0.141                   | 35,214.00  | 34            | 1.197                   | 35,214.00  | 3             | 0.106                   | 35,214.00  | 37            | 1.3           |
| Secondary Distribution                            | ,        |                       |           |               | •                       |            |               |                         |            | •             |                         |            |               |                         |            |               |                         |            | <del></del>   |               |
| AF  |          |                       |           | -             | -                       |            | 1             | 0.036                   |            | 3             | 0.106                   |            | 33            | 1.162                   |            | 3             | 0.106                   |            | 36            | 1.            |
| AFNG  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.035                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| AFR   |          |                       |           | -             | -                       |            | -             | -                       |            | -             | -                       |            | 1             | 0.035                   |            | -             | -                       |            | 1             | 0.0           |
| RLR VIB TYPE II<br>(3895-01-071-5625)<br>(4)      | A        |                       | -         | -             | -                       | 112,409.00 | 7             | 0.787                   | 148,129.00 | 43            | 6.370                   | 150,000.00 | 30            | 4.500                   | 150,000.00 | 5             | 0.750                   | 150,000.00 | 35            | 5.2           |
| Secondary Distribution                            | ,        |                       |           |               | ,                       |            |               |                         |            | ,             |                         |            |               |                         |            |               |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 7             | 0.787                   |            | 42            | 6.221                   |            | 30            | 4.500                   |            | 5             | 0.750                   |            | 35            | 5.2           |
| AFNG  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.148                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| 1500G<br>WATER DISTR<br>(3825-00-554-1808)<br>(5) | A        |                       | -         | -             | -                       | 123,397.00 | 41            | 5.059                   | 190,920.00 | 54            | 10.310                  | -          | -             | -                       | -          | -             | -                       | -          | -             |               |
| Secondary Distribution                            | ,        |                       |           |               | ,                       |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 41            | 5.059                   |            | 54            | 10.310                  |            | -             | -                       |            | -             | -                       |            | -             |               |
| TRAC IND IW-70<br>(2420-00-113-8984)              | Α        |                       | -         | -             | -                       | 40,695.00  | 5             | 0.203                   | 48,269.00  | 19            | 0.917                   | 67,224.00  | 6             | 0.403                   | 67,224.00  | 4             | 0.269                   | 67,224.00  | 10            | 0.6           |
| Secondary Distribution                            |          |                       |           |               | ,                       |            | '             |                         | '          | <del></del>   |                         |            |               |                         |            |               |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 3             | 0.122                   |            | 17            | 0.821                   |            | 6             | 0.403                   |            | 4             | 0.269                   |            | 10            | 0.6           |
| AFNG  |          |                       |           | -             | -                       |            | 2             | 0.081                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |               |
| AFR   |          |                       |           | -             | -                       |            | -             | -                       |            | 2             | 0.097                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| DOZER T7<br>(2410-00-756-1161)                    | Α        |                       | -         | -             | -                       | 276,360.00 | 1             | 0.276                   | 281,399.00 | 10            | 2.814                   | 713,498.00 | 2             | 1.427                   | 713,498.00 | 3             | 2.140                   | 713,498.00 | 5             | 3.5           |

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Volume 1 - 54 P-1 Line #10

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017 Aggregated Items Title:

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 02 / 6 826990 / Base Maintenance Support Vehicles Base Maintenance Support Vehicles

|   |          |                       | P         | rior Years    | s                       |            | FY 2016       |                         |            | FY 2017       |                         | FY         | 2018 Bas      | se                      | FY         | 2018 OC       | 0                       | FY         | 2018 Tot      | al            |
|---|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|---------------|
| Item Number /<br>Title [DODIC]                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost |
| AF  |          |                       | , ,       | -             | -                       |            | 1             | 0.276                   |            | 9             | 2.533                   |            | 2             | 1.427                   | . ,        | 3             | 2.140                   | . ,        | 5             | 3.5           |
| AFNG  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.281                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| GRADER, SIZE<br>V, TYPE III<br>(3805-01-337-4624) | Α        |                       | -         | -             | -                       | 207,907.00 | 6             | 1.247                   | 311,615.00 | 30            | 9.348                   | 312,000.00 | 16            | 4.992                   | 312,000.00 | 4             | 1.248                   | 312,000.00 | 20            | 6.2           |
| Secondary Distribution                            | 1        |                       |           |               | ,                       |            | ,             |                         |            |               |                         | ,          | -             |                         |            | •             |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 6             | 1.247                   |            | 30            | 9.348                   |            | 16            | 4.992                   |            | 4             | 1.248                   |            | 20            | 6.2           |
| TRACTOR,<br>WHLD IND.<br>(2420-01-536-8542)       | Α        |                       | -         | -             | -                       | 145,892.00 | 1             | 0.146                   | 147,585.00 | 1             | 0.148                   | 149,492.00 | 73            | 10.913                  | 149,492.00 | 8             | 1.196                   | 149,492.00 | 81            | 12.1          |
| Secondary Distribution                            | ,        |                       |           |               |                         |            |               |                         |            |               |                         |            | ,             |                         |            |               |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 1             | 0.146                   |            | 1             | 0.148                   |            | 73            | 10.913                  |            | 8             | 1.196                   |            | 81            | 12.1          |
| SEWER TRK<br>TANDEM AXLE<br>(2320-01-500-5501)    | А        |                       | -         | -             | -                       | 405,759.00 | 1             | 0.406                   | 401,250.00 | 5             | 2.006                   | 415,000.00 | 2             | 0.830                   | 415,000.00 | 3             | 1.245                   | 415,000.00 | 5             | 2.0           |
| Secondary Distribution                            | , '      |                       |           |               | J                       |            |               |                         |            |               |                         |            |               |                         |            | 1             |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 1             | 0.406                   |            | 5             | 2.006                   |            | 2             | 0.830                   |            | 3             | 1.245                   |            | 5             | 2.0           |
| WATER WAGON<br>(3825-01-539-6813)                 | Α        |                       | -         | -             | -                       | -          | -             | -                       | 109,407.00 | 1             | 0.109                   | -          | -             | -                       | -          | -             | -                       | -          | -             |               |
| Secondary Distribution                            | ,        |                       |           |               |                         | •          | ,             |                         |            |               |                         |            | •             |                         |            | ,             |                         |            | ·             |               |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.109                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| TLR DITCHING<br>MACH<br>(2330-01-079-4053)        | A        |                       | -         | -             | -                       | 16,223.00  | 15            | 0.243                   | 32,500.00  | 24            | 0.780                   | -          | -             | -                       | -          | -             | -                       | -          | -             |               |
| Secondary Distribution                            | , '      |                       |           |               |                         | 1          |               |                         |            |               |                         |            |               |                         |            | Į.            |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 15            | 0.243                   |            | 23            | 0.748                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| AFNG  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.033                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| CR HYD TRK<br>100-150T<br>(3810-01-259-9992)      | Α        |                       | -         | -             | -                       | -          | -             | -                       | 968,353.00 | 1             | 0.968                   | 969,000.00 | 1             | 0.969                   | 969,000.00 | 6             | 5.814                   | 969,000.00 | 7             | 6.7           |
| Secondary Distribution                            | ,        |                       |           |               |                         | •          |               |                         |            | ·             |                         |            | ,             |                         |            | ,             |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | -             | -                       |            | 1             | 0.968                   |            | 1             | 0.969                   |            | 6             | 5.814                   |            | 7             | 6.7           |
| GRADER, SZ 6<br>(3805-01-373-5314)                | Α        |                       | -         | -             | -                       | 177,813.00 | 1             | 0.178                   | 200,855.00 | 6             | 1.205                   | -          | -             | -                       | -          | -             | -                       | -          | -             |               |
| Secondary Distribution                            | 1        |                       |           |               | ,                       |            | ,             |                         |            |               |                         |            |               |                         |            | •             |                         |            |               |               |
| AF  |          |                       |           | -             | -                       |            | 1             | 0.178                   |            | 6             | 1.205                   |            | -             | -                       |            | -             | -                       |            | -             |               |
| 7.5 T CRANE<br>(3810-01-106-3991)                 | Α        |                       | -         | -             | -                       | 302,548.00 | 1             | 0.303                   | 305,805.00 | 7             | 2.141                   | 308,548.00 | 2             | 0.617                   | 308,548.00 | 3             | 0.926                   | 308,548.00 | 5             | 1.5           |
| Secondary Distribution                            | ,        |                       |           |               |                         |            |               |                         |            |               |                         |            | '             |                         |            |               |                         | ,          |               |               |
| AF  |          |                       |           | _             | _                       |            | 1             | 0.303                   |            | 7             | 2.141                   |            | 2             | 0.617                   |            | 3             | 0.926                   |            | 5             | 1.5           |

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P-1 Line #10

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6

P-1 Line Item Number / Title:

8080F / 02 / 6 826990 / Base Maintenance Support Vehicles

**Aggregated Items Title:**Base Maintenance Support Vehicles

| 080F / 02 / 6  |          |                       |           |               |                         |            |               | 203301                  | Dase IVI   | aintenan             | ce Supp                 |            |               |                         |            |               |                         | e Suppor   | t vernor      |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|----------------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|
|  |          |                       | P         | rior Years    | s                       |            | FY 2016       |                         |            | FY 2017              |                         | FY         | 2018 Bas      | se                      | FY         | 2018 OC       | 0                       | FY         | 2018 Tota     | al                      |
| Item Number /<br>Title [DODIC]                         | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| TLR MANHOLE<br>CLNR<br>(2330-00-307-3295)              | Α        |                       | -         | -             | -                       | 54,821.00  | 3             | 0.164                   | 54,950.00  | 3                    | 0.165                   | 55,000.00  | 10            | 0.550                   | 55,000.00  | 6             | 0.330                   | 55,000.00  | 16            | 0.8                     |
| Secondary Distribution                                 | ,        |                       | •         |               | ,                       | ·          |               |                         |            | *                    |                         |            |               |                         |            | •             |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |            | 3             | 0.164                   |            | 3                    | 0.165                   |            | 10            | 0.550                   |            | 6             | 0.330                   |            | 16            | 0.8                     |
| TRUCK, DUMP<br>(2320-01-344-9282)<br>(6)               | A        |                       | -         | -             | -                       | 132,954.00 | 108           | 14.359                  | 143,753.00 | 196                  | 28.176                  | 139,254.00 | 2             | 0.279                   | 139,254.00 | 4             | 0.557                   | 139,254.00 | 6             | 0.0                     |
| Secondary Distribution                                 |          |                       |           |               |                         |            |               |                         |            |                      |                         | l .        |               |                         |            |               |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |            | 82            | 10.902                  |            | 196                  | 28.176                  |            | 2             | 0.279                   |            | 4             | 0.557                   |            | 6             | 0.8                     |
| AFR  |          |                       |           | -             | -                       |            | 26            | 3.457                   |            | -                    | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| COMPACTOR<br>TRACK LOADER<br>(3805-01-603-8653)<br>(7) | Α        |                       | -         | -             | -                       | 112,580.00 | 100           | 11.258                  | 148,066.00 | 25                   | 3.702                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                                 |          |                       |           |               |                         |            |               |                         |            |                      |                         | ,          |               |                         |            |               |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |            | 100           | 11.258                  |            | 25                   | 3.702                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| DRIER-MXR,<br>BIT CONCR<br>(3895-01-624-1958)<br>(8)   | Α        |                       | -         | -             | -                       | 152,637.00 | 40            | 6.105                   | 253,553.00 | 16                   | 4.057                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                                 | ,        |                       |           |               | ,                       | ·          |               |                         |            | *                    |                         |            |               |                         |            | ,             |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |            | 40            | 6.105                   |            | 16                   | 4.057                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| 2000 GAL<br>WATER TANK<br>(3825-01-624-1963)           | A        |                       | -         | -             | -                       | 65,501.00  | 91            | 5.961                   | 82,489.00  | 16                   | 1.320                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                                 | ,        |                       | 1         |               |                         |            |               |                         |            |                      |                         |            | l             |                         |            | ļ             |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |            | 91            | 5.961                   |            | 16                   | 1.320                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| MIXER,<br>BITUMINOUS MA<br>(3895-01-627-1341)<br>(10)  | Α        |                       | -         | -             | -                       | 203,040.00 | 8             | 1.624                   | 358,820.00 | 2                    | 0.718                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                                 | ,        |                       |           |               |                         |            |               |                         |            | ,                    |                         |            | ,             |                         |            | ,             |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |            | 8             | 1.624                   |            | 2                    | 0.718                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| T11 DOZER<br>(2410-00-731-7872)                        | А        |                       | -         | -             | -                       | -          | -             | -                       | -          | -                    | -                       | 581,000.00 | 12            | 6.972                   | 581,000.00 | 3             | 1.743                   | 581,000.00 | 15            | 8.                      |
| Secondary Distribution                                 |          |                       |           |               | 1                       |            |               |                         |            |                      |                         |            |               |                         | ,          |               |                         |            |               |                         |
| AF   |          |                       |           | -             | -                       |            | -             | -                       |            | -                    | -                       |            | 12            | 6.972                   |            | 3             | 1.743                   |            | 15            | 8.                      |
| MIXER CON<br>TRLR MTD<br>(3895-01-005-5422)            | Α        |                       | -         | -             | -                       | 224,903.00 | 7             | 1.574                   | 287,500.00 | 5                    | 1.438                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |

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P-1 Line #10 Volume 1 - 56

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:

**Date:** May 2017

| 080F / 02 / 6   |          |                       |           |               |               |            |               | 200001                  | Dage IVI   | antenan       | oc oup                  | port Vehi  |                      |               |            |               |                         | e Suppoi   |               |                     |
|---|----------|-----------------------|-----------|---------------|---------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|----------------------|---------------|------------|---------------|-------------------------|------------|---------------|---------------------|
|   |          |                       | P         | rior Year     | s             |            | FY 2016       |                         |            | FY 2017       |                         | FY         | / 2018 Ba            | se            | FY         | / 2018 OC     | 0                       | FY         | 2018 Tot      | tal                 |
| Item Number /<br>Title [DODIC]                        | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Tot<br>Co:<br>(\$ A |
| Secondary Distribution                                | ,        |                       |           | . ,           | , ,           | . ,        | . , ,         | . ,                     |            | , ,           |                         |            | , ,                  | , ,           | . , ,      | , ,           | , ,                     | . , ,      | . ,           |                     |
| AF  |          |                       |           | -             | -             |            | 6             | 1.349                   |            | 5             | 1.438                   |            | -                    | -             |            | -             | -                       |            | -             |                     |
| AFNG  |          |                       |           | -             | -             |            | 1             | 0.225                   |            | -             | -                       |            | -                    | -             |            | -             | -                       |            | -             |                     |
| COMPACT<br>EXCAVATOR<br>CRAWLER<br>(3805-01-565-8767) | A        |                       | -         | -             | -             | 40,484.00  | 6             | 0.243                   | 42,350.00  | 9             | 0.381                   | -          | -                    | -             | -          | -             | -                       | -          | -             |                     |
| Secondary Distribution                                | 7        |                       |           |               |               |            |               |                         |            |               |                         |            |                      |               |            |               |                         |            |               |                     |
| AF  |          |                       |           | -             | -             |            | 6             | 0.243                   |            | 9             | 0.381                   |            | -                    | -             |            | -             | -                       |            | -             |                     |
| SCRAPPER<br>MOTORIZED 18CY<br>(3805-00-234-9778)      | А        |                       | -         | -             | -             | 729,793.00 | 2             | 1.460                   | 460,833.00 | 5             | 2.304                   | -          | -                    | -             | -          | -             | -                       | -          | -             |                     |
| Secondary Distribution                                | 7        |                       |           |               |               |            |               |                         |            |               |                         |            |                      |               |            |               |                         |            |               | ,                   |
| AF  |          |                       |           | -             | -             |            | 2             | 1.460                   |            | 5             | 2.304                   |            | -                    | -             |            | -             | -                       |            | -             |                     |
| CRUSH-<br>SCREEN 150TH<br>(3820-00-060-1841)          | А        |                       | -         | -             | -             | -          | -             | -                       | -          | -             | -                       | 2,323K     | 1                    | 2.323         | 2,323K     | 3             | 6.970                   | 2,323K     | 4             |                     |
| Secondary Distribution                                | 7        |                       |           |               |               |            |               |                         |            |               |                         |            |                      |               |            |               |                         |            |               | ,                   |
| AF  |          |                       |           | -             | -             |            | -             | -                       |            | -             | -                       |            | 1                    | 2.323         |            | 3             | 6.970                   |            | 4             |                     |
| T7 DOZER<br>(2410-00-816-5091)                        | А        |                       | -         | -             | -             | -          | -             | -                       | 285,399.00 | 4             | 1.142                   | 488,146.00 | 6                    | 2.929         | 488,146.00 | 4             | 1.953                   | 488,146.00 | 10            |                     |
| Secondary Distribution                                | 1        |                       |           |               |               |            |               |                         |            |               |                         |            |                      |               |            |               |                         |            |               |                     |
| AF  |          |                       |           | -             | -             |            | -             | -                       |            | 4             | 1.142                   |            | 6                    | 2.929         |            | 4             | 1.953                   |            | 10            |                     |
| SEMI TRAILER<br>DUMP<br>(2330-00-141-5567)            | A        |                       | -         | -             | -             | -          | -             | -                       | 42,432.00  | 1             | 0.042                   | -          | -                    | -             | -          | -             | -                       | -          | -             |                     |
| Secondary Distribution                                | 1        |                       |           |               |               |            |               |                         |            |               |                         |            |                      |               |            |               |                         |            |               |                     |
| AF  |          |                       |           | -             | -             |            | -             | -                       |            | 1             | 0.042                   |            | -                    | -             |            | -             | -                       |            | -             |                     |
| TRK CNTRN-<br>MAINT 4X2 SZ 5<br>(2320-01-030-7370)    | А        |                       | -         | -             | -             | -          | -             | -                       | 106,167.00 | 2             | 0.212                   | -          | -                    | -             | -          | -             | -                       | -          | -             |                     |
| Secondary Distribution                                | 1        |                       |           |               |               |            |               |                         |            |               |                         |            |                      |               |            |               |                         |            |               |                     |
| AF  |          |                       |           | -             | -             |            | -             | -                       |            | 1             | 0.106                   |            | -                    | -             |            | -             | -                       |            | -             |                     |
| AFNG  |          |                       |           | -             | -             |            | -             | -                       |            | 1             | 0.106                   |            | -                    | -             |            | -             | -                       |            | -             |                     |
| CLNR SEWER<br>JET RODDER<br>(2320-01-372-1823)        | A        |                       | -         | -             | -             | -          | -             | -                       | 289,769.00 | 1             | 0.290                   | -          | 1                    | -             | -          | -             | -                       | -          | -             |                     |
| Secondary Distribution                                | 1        |                       |           |               |               |            |               |                         |            |               |                         |            |                      |               |            |               |                         |            |               | ,                   |
| AF  |          |                       |           | -             | -             |            | -             | -                       |            | 1             | 0.290                   |            | -                    | -             |            | -             | -                       |            | -             |                     |
| STLR CG<br>6000PSI 47700SC<br>(2330-01-112-3836)      | А        |                       | -         | -             | -             | -          | -             | -                       | 389,097.00 | 3             | 1.167                   | -          | -                    | -             | -          | -             | -                       | -          | -             |                     |

LI 826990 - Base Maintenance Support Vehicles Air Force

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P-1 Line #10

Volume 1 - 57

**Date:** May 2017 Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:

Aggregated Items Title:

|  |          |                       | _         |                      |                         | 1          |               |                         |            | aintenan      |                         |           |                      |                         |           |               |                         | e Suppor  |               |                      |
|--|----------|-----------------------|-----------|----------------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|----------------------|
|  |          |                       | Р         | rior Year            | S                       |            | FY 2016       |                         |            | FY 2017       |                         | FY        | 2018 Ba              | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 Tot      | tal                  |
| Item Number /<br>Title [DODIC]                       | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Tota<br>Cos<br>(\$ A |
| Secondary Distribution                               | , '      |                       |           |                      |                         | 1          |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF   |          |                       |           | -                    | _                       |            | -             | -                       |            | 3             | 1.167                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| CARR PERS ARMD<br>(2350-00-968-6321)                 | Α        |                       | -         | -                    | -                       | -          | -             | -                       | 77,714.00  | 2             | 0.155                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                               | )        |                       |           |                      |                         |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF   |          |                       |           | -                    | -                       |            | -             | -                       |            | 2             | 0.155                   |           | -                    | -                       |           | -             | -                       |           | _             |                      |
| TRAC WHLD<br>W-DOZER<br>(2420-00-540-3881)           | A        |                       | -         | -                    | -                       | 651,357.00 | 1             | 0.651                   | 528,494.00 | 6             | 3.171                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                               | ,        |                       |           |                      |                         |            |               |                         |            |               |                         |           |                      | 1                       |           |               |                         |           |               |                      |
| AF   |          |                       |           | -                    | -                       |            | 1             | 0.651                   |            | 6             | 3.171                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| TRACTOR<br>WHLD IND<br>90HP(2420-01-406-29           | A<br>95) |                       | -         | -                    | -                       | 58,506.00  | 16            | 0.936                   | 43,265.00  | 7             | 0.303                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                               | )        |                       | ,         |                      |                         |            |               |                         |            |               |                         | ,         |                      |                         |           |               |                         |           |               | ,                    |
| AF   |          |                       |           | -                    | -                       |            | 15            | 0.878                   |            | 7             | 0.303                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFNG   |          |                       |           | -                    | -                       |            | 1             | 0.059                   |            | -             | -                       |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| LOADER SKID<br>STEER TRACK MTD<br>(3805-00-278-1245) | А        |                       | -         | -                    | -                       | 59,434.00  | 2             | 0.119                   | 119,172.00 | 11            | 1.311                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                               | )        |                       |           |                      |                         |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF   |          |                       |           | -                    | -                       |            | 1             | 0.059                   |            | 11            | 1.311                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFNG   |          |                       |           | -                    | -                       |            | 1             | 0.059                   |            | -             | -                       |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| 50 TON CRANE<br>(3810-00-272-9031)                   | Α        |                       | -         | -                    | -                       | 590,609.00 | 1             | 0.591                   | 624,130.00 | 3             | 1.872                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                               |          |                       |           |                      |                         |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF   |          |                       |           | -                    | -                       |            | 1             | 0.591                   |            | 2             | 1.248                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| AFNG   |          |                       |           | -                    | -                       |            | -             | -                       |            | 1             | 0.624                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| CR WHLD HYD 15T<br>(3810-00-329-4154)                | A        |                       | -         | -                    | -                       | 343,001.00 | 1             | 0.343                   | 352,418.00 | 9             | 3.172                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                               | 1        |                       |           |                      |                         |            |               |                         |            |               |                         |           |                      |                         |           |               |                         |           |               |                      |
| AF   |          |                       |           | -                    | -                       |            | 1             | 0.343                   |            | 9             | 3.172                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| CR MSL ENG<br>CHG 8 1-2T<br>(3810-00-827-9352)       | A        |                       | -         | -                    | -                       | -          | -             | -                       | 511,970.00 | 1             | 0.512                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |
| Secondary Distribution                               | ,        |                       |           |                      |                         |            |               |                         |            | Į.            |                         | ·         |                      |                         |           |               |                         | ,         |               |                      |
| AF   |          |                       |           | -                    | -                       |            | -             | -                       |            | 1             | 0.512                   |           | -                    | -                       |           | -             | -                       |           | -             |                      |
| CR HYD TRK<br>MTD 60-65T<br>(3810-01-038-8315)       | А        |                       | -         | -                    | -                       | 526,856.00 | 1             | 0.527                   | 695,279.00 | 1             | 0.695                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                      |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6

P-1 Line Item Number / Title:

826990 / Rase Maintenance Sunnort Vehicles

Aggregated Items Title: Base Maintenance Support Vehicles

| 080F / 02 / 6                                     |          |                       |           |                      |                         |            |               | 200001                  | Base Ma    |                      | oc oup                  |            |                      |                         |            |                      |                         | Suppor     |                      |             |
|---|----------|-----------------------|-----------|----------------------|-------------------------|------------|---------------|-------------------------|------------|----------------------|-------------------------|------------|----------------------|-------------------------|------------|----------------------|-------------------------|------------|----------------------|-------------|
|   |          |                       | P         | rior Year            | s                       |            | FY 2016       |                         |            | FY 2017              |                         | FY         | 2018 Bas             | se                      | FY         | 2018 OC              | 0                       | FY         | 2018 Tot             | al          |
| Item Number /<br>Title [DODIC]                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Tota<br>Cos |
| AF  |          |                       |           | -                    | -                       |            | 1             | 0.527                   |            | 1                    | 0.695                   |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| CRANE<br>HYDRAULIC 15T<br>(3810-01-485-8693)      | Α        |                       | -         | -                    | -                       | 174,018.00 | 1             | 0.174                   | 196,330.00 | 5                    | 0.982                   | -          | -                    | -                       | -          | -                    | -                       | -          | -                    |             |
| Secondary Distribution                            |          |                       |           |                      |                         |            |               |                         |            |                      |                         |            |                      |                         |            |                      |                         |            |                      |             |
| AF  |          |                       |           | -                    | -                       |            | 1             | 0.174                   |            | 5                    | 0.982                   |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| CRANE TRK<br>MTD 28 TON<br>(3810-001-506-6637)    | Α        |                       | -         | -                    | -                       | -          | -             | -                       | 265,635.00 | 4                    | 1.063                   | -          | -                    | -                       | -          | -                    | -                       | -          | -                    |             |
| Secondary Distribution                            |          |                       |           |                      |                         |            |               |                         |            |                      |                         |            |                      |                         |            |                      |                         |            |                      |             |
| AF  |          |                       |           | -                    | -                       |            | -             | -                       |            | 4                    | 1.063                   |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| DISTR WTR STLR<br>(3825-00-570-3417)              | Α        |                       | -         | -                    | -                       | 124,067.00 | 3             | 0.372                   | 121,031.00 | 3                    | 0.363                   | -          | -                    | -                       | -          | -                    | -                       | -          | -                    |             |
| Secondary Distribution                            |          |                       |           |                      |                         |            | •             |                         |            |                      |                         |            |                      |                         |            |                      |                         |            |                      |             |
| AF  |          |                       |           | -                    | -                       |            | 1             | 0.124                   |            | 3                    | 0.363                   |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| AFNG  |          |                       |           | -                    | -                       |            | 2             | 0.248                   |            | -                    | -                       |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| PAVEMENT<br>PROFILER<br>(3895-01-108-3606)        | А        |                       | -         | -                    | -                       | -          | -             | -                       | 357,960.00 | 7                    | 2.506                   | -          | -                    | -                       | -          | -                    | -                       | -          | -                    |             |
| Secondary Distribution                            |          |                       |           |                      |                         |            |               |                         |            |                      |                         |            |                      |                         |            |                      |                         |            |                      |             |
| AF  |          |                       |           | -                    | -                       |            | -             | -                       |            | 7                    | 2.506                   |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| ROLLER<br>MOTORIZED<br>(3895-01-603-8654)         | А        |                       | -         | -                    | -                       | 28,934.00  | 4             | 0.116                   | 41,500.00  | 9                    | 0.374                   | 42,000.00  | 4                    | 0.168                   | 42,000.00  | 4                    | 0.168                   | 42,000.00  | 8                    | (           |
| Secondary Distribution                            |          |                       | ,         |                      |                         |            |               |                         |            | ,                    |                         |            |                      |                         |            | ,                    |                         | ,          | ·                    |             |
| AF  |          |                       |           | -                    | -                       |            | 4             | 0.116                   |            | 9                    | 0.374                   |            | 4                    | 0.168                   |            | 4                    | 0.168                   |            | 8                    | (           |
| DUMP TRUCK<br>6X4 55K GVW<br>(2320-01-058-5725)   | Α        |                       | -         | -                    | -                       | 129,512.00 | 1             | 0.130                   | 103,653.00 | 16                   | 1.658                   | 134,000.00 | 4                    | 0.536                   | 134,000.00 | 3                    | 0.402                   | 134,000.00 | 7                    | (           |
| Secondary Distribution                            |          |                       |           |                      |                         |            |               |                         |            |                      |                         |            |                      |                         |            |                      |                         |            |                      |             |
| AF  |          |                       |           | -                    | -                       |            | -             | -                       |            | 15                   | 1.555                   |            | 2                    | 0.268                   |            | 3                    | 0.402                   |            | 5                    | (           |
| AFNG  |          |                       |           | -                    | -                       |            | -             | -                       |            | 1                    | 0.104                   |            | 2                    | 0.268                   |            | -                    | -                       |            | 2                    | (           |
| AFR   |          |                       |           | -                    | -                       |            | 1             | 0.130                   |            | -                    | -                       |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| EXCAVATOR<br>CRAWLER MTD<br>(3805-01-058-3562)    | A        |                       | -         | -                    | -                       | 177,742.00 | 3             | 0.533                   | 201,239.33 | 6                    | 1.207                   | -          | -                    | -                       | -          | -                    | -                       | -          | -                    |             |
| Secondary Distribution                            |          |                       |           |                      |                         |            |               |                         |            |                      |                         |            |                      |                         |            |                      |                         |            |                      |             |
| AF  |          |                       |           | -                    | -                       |            | 3             | 0.533                   |            | 5                    | 1.006                   |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| AFNG  |          |                       |           | -                    | -                       |            | -             | -                       |            | 1                    | 0.201                   |            | -                    | -                       |            | -                    | -                       |            | -                    |             |
| MIXER CONCRETE<br>TM 6-8 CY<br>(3895-00-834-6124) | Α        |                       | -         | -                    | -                       | -          | -             | -                       | 289,928.00 | 18                   | 5.219                   | -          | -                    | -                       | -          | -                    | -                       | -          | -                    |             |

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P-1 Line #10

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 02 / 6

P-1 Line Item Number / Title:

826990 / Base Maintenance Support Vehicles

Base Maintenance Support Vehicles

| 080F / 02 / 6                                |     |                       |           |                      |                         |            | 0                    | 20990 1                 | Base Ma    | amtenan       | ce Supp                 | Joil ven   | icies         |                         | Di         | ase iviali    | itenance                | e Suppor   | t venici      | es                      |
|--|-----|-----------------------|-----------|----------------------|-------------------------|------------|----------------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|
|  |     |                       | P         | rior Years           | s                       |            | FY 2016              |                         |            | FY 2017       |                         | F۱         | / 2018 Bas    | se                      | FY         | 2018 OC       | 0                       | FY         | 2018 Tot      | tal                     |
| Item Number /<br>Title [DODIC]               | ID  | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Secondary Distribution                       | )   |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF   |     |                       |           | -                    | -                       |            | -                    | -                       |            | 15            | 4.349                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| AFNG   |     |                       |           | -                    | -                       |            | -                    | -                       |            | 3             | 0.870                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| CRUSHING PLANT<br>(3820-01-218-0595)         | A   |                       | -         | -                    | -                       | 500,979.00 | 1                    | 0.501                   | -          | -             | -                       | 502,862.00 | 3             | 1.509                   | 502,862.00 | 6             | 3.017                   | 502,862.00 | 9             | 4.5                     |
| Secondary Distribution                       | 1   |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF   |     |                       |           | -                    | -                       |            | 1                    | 0.501                   |            | -             | -                       |            | 3             | 1.509                   |            | 6             | 3.017                   |            | 9             | 4.5                     |
| PAVING<br>(3895-00-190-3313)                 | A   |                       | -         | -                    | -                       | 383,196.00 | 1                    | 0.383                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                       | )   |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF   |     |                       |           | -                    | -                       |            | 1                    | 0.383                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| EXCAVATOR<br>TRK MTD<br>(3805-00-618-7337)   | A   |                       | -         | -                    | -                       | 395,944.00 | 1                    | 0.396                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                       | )   |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF   |     |                       |           | -                    | -                       |            | 1                    | 0.396                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| DRILL ROCK<br>(3820-00-050-9964)             | А   |                       | -         | -                    | -                       | -          | -                    | -                       | 451,894.00 | 2             | 0.904                   | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                       | ,   |                       | '         |                      |                         |            |                      |                         |            | ,             |                         |            | ,             |                         |            |               |                         |            | ,             |                         |
| AF   |     |                       |           | -                    | -                       |            | -                    | -                       |            | 2             | 0.904                   |            | -             | -                       |            | -             | -                       |            | -             |                         |
| DIGGER<br>STRAINER TWD<br>(3805-00-202-7377) | A   |                       | -         | -                    | -                       | 45,605.00  | 1                    | 0.046                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                       | )   |                       | l l       |                      |                         |            |                      |                         |            |               |                         | ı          |               |                         |            |               |                         |            |               |                         |
| AFR  |     |                       |           | -                    | -                       |            | 1                    | 0.046                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| WELL DRLG MACH<br>(3820-00-286-9196)         | А   |                       | -         | -                    | 0.000                   | -          | -                    | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| WELL DRLG MACH<br>(3820-01-154-6589          | А   |                       | -         | -                    | -                       | 2,288K     | 1                    | 2.288                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                       | , , |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AFNG   |     |                       |           | -                    | -                       |            | 1                    | 2.288                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| DRIER MXR<br>BIT-CNRT<br>(3895-00-554-5162)  | A   |                       | -         | -                    | -                       | 30,472.00  | 1                    | 0.030                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                       | ,   |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |
| AF   |     |                       |           | -                    | -                       |            | 1                    | 0.030                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -             |                         |
| COMPACT<br>SHEEPS FOOT<br>(3805-01-359-7626) | A   |                       | -         | -                    | -                       | 425,969.00 | 2                    | 0.852                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             |                         |
| Secondary Distribution                       | ,   |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            | ,             |                         |
|  |     |                       |           |                      |                         |            |                      |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6

P-1 Line Item Number / Title:

826990 / Base Maintenance Support Vehicles

**Aggregated Items Title:**Base Maintenance Support Vehicles

|  |          |                       | F         | Prior Years   | s                       |            | FY 2016       |                         |            | FY 2017       |                         | F          | / 2018 Ba     | se                      | F۱         | 2018 OC       | 0                       | FY         | <b>2018 Tot</b> | tal                     |
|--|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|-----------------|-------------------------|
| Item Number /<br>Title [DODIC]                 | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each)   | Total<br>Cost<br>(\$ M) |
| AFNG   |          |                       |           | -             | -                       |            | 1             | 0.426                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -               | -                       |
| SEWER TRK<br>SINGLE AXLE<br>(2320-01-501-8524) | Α        |                       | -         | -             | -                       | 367,982.00 | 1             | 0.368                   | 367,982.00 | 45            | 16.559                  | -          | -             | -                       | -          | -             | -                       | -          | -               | -                       |
| Secondary Distribution                         |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         | •          |               |                         |            |                 |                         |
| AF   |          |                       |           | -             | -                       |            | 1             | 0.368                   |            | 45            | 16.559                  |            | -             | -                       |            | -             | -                       |            | -               | -                       |
| 50T CRANE<br>(3810-01-079-8358)                | Α        |                       | -         | -             | -                       | 385,035.00 | 2             | 0.770                   | -          | -             | -                       | 413,569.00 | 2             | 0.827                   | 413,569.00 | 2             | 0.827                   | 413,569.00 | 4               | 1.6                     |
| Secondary Distribution                         |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |                 |                         |
| AF   |          |                       |           | -             | -                       |            | 2             | 0.770                   |            | -             | -                       |            | 2             | 0.827                   |            | 2             | 0.827                   |            | 4               | 1.6                     |
| WHLD HYD 15T<br>(3810-00-554-4103)             | Α        |                       | -         | -             | -                       | -          | -             | -                       | 657,000.00 | 2             | 1.314                   | -          | -             | -                       | -          | -             | -                       | -          | -               |                         |
| Secondary Distribution                         |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         | '          |                 |                         |
| AF   |          |                       |           | -             | -                       |            | -             | -                       |            | 2             | 1.314                   |            | -             | -                       |            | -             | -                       |            | -               |                         |
| PAVER<br>CONCRETE SLIP<br>(3895-01-535-4275)   | Α        |                       | -         | -             | -                       | 440,818.00 | 1             | 0.441                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -               |                         |
| Secondary Distribution                         |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |                         |            |                 |                         |
| AF   |          |                       |           | -             | -                       |            | 1             | 0.441                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -               |                         |
| RUBBER<br>REMOVAL TRK<br>(3805-01-592-7853)    | Α        |                       | -         | -             | -                       | 554,726.00 | 1             | 0.555                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -               |                         |
| Secondary Distribution                         |          |                       |           |               |                         |            |               |                         |            |               |                         |            | ,             |                         |            | ,             |                         |            |                 |                         |
| AF   |          |                       |           | -             | -                       |            | 1             | 0.555                   |            | -             | -                       |            | -             | -                       |            | -             | -                       |            | -               |                         |
| TAC WHLD MULTI<br>(2420-01-366-6796)           | Α        |                       | -         | -             | 0.000                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -               |                         |
| PMA OTHER<br>GOVERNMENT<br>COSTS               | Α        |                       | -         | -             | -                       | -          | -             | -                       | -          | -             | 0.007                   | -          | -             | 0.013                   | -          | -             | -                       | -          | -               | 0.0                     |
| Secondary Distribution                         |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            | ,             |                         | '          |                 |                         |
| AF   |          |                       |           | -             | -                       |            | -             | -                       |            | -             | 0.007                   |            | -             | 0.013                   |            | -             | -                       |            | -               | 0.0                     |
| ubtotal: Uncategorized                         |          | ,                     | -         | -             | -                       | -          | -             | 92.581                  | -          | -             | 180.275                 | -          | -             | 60.075                  | -          | -             | 40.451                  | -          | -               | 100.5                   |
| otal   |          |                       | -         | -             | -                       | -          | -             | 92.581                  | -          | -             | 180.275                 | -          | -             | 60.075                  | -          | -             | 40.451                  | -          | -               | 100.5                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### Remarks:

Based on AF Mission changes and/or AF Mission priorities, NSNs and/or quantities may change during year of execution.

UNIT COSTS FOR FY18 ARE SUBJECT TO CHANGE.

PROGRAM MANAGEMENT ADMINISTRATION(PMA): PMA supports the operation of the program office in its management and oversight role via travel, procurement of supplies and Advisory and administrative Services(A&AS).

| Exhibit P-40a, Budget Item Justification For Aggregated  | Items: FY 2018 Air Force  | <b>Date:</b> May 2017                                     |
|--|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6  | P-1 Line Item Number / Title:<br>826990 / Base Maintenance Support Vehicles | Aggregated Items Title: Base Maintenance Support Vehicles |
| Footnotes:  (1) FY16 Airfield Damage Repair (ADR) Requirement Quantity 27.  (2) FY16 Airfield Damage Repair (ADR) Requirement Quantity 23.  (3) FY16 Airfield Damage Repair (ADR) Requirements Quantity 22.  (4) FY16 Airfield Damage Repair (ADR) Requirements Quantity 6.  (5) FY16 Airfield Damage Repair (ADR) Requirements Quantity 23.  (6) FY16 Airfield Damage Repair (ADR) Requirement Quantity 33.  (7) FY16 Airfield Damage Repair (ADR) Requirement Quantity 100.  (8) FY16 Airfield Damage Repair (ADR) Requirements Quantity 40.  (9) FY16 Airfield Damage Repair (ADR) Requirements Quantity 91  (10) FY16 Airfield Damage Repair (ADR) Requirement Quantity 8. | 820990 / Base Maintenance Support Venicles                                  | Base Maintenance Support Venicles                         |

LI 826990 - Base Maintenance Support Vehicles Air Force

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

831010 / Comsec Equipment

Equip / BSA 1: Comm Security Equipment(Comsec)

Program Elements for Code B Items: 0207448F Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior        |                  |                   | FY 2018           | FY 2018          | FY 2018        |                 |               |         |         | То       |        |
|--|--------------|------------------|-------------------|-------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|--------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base              | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 136.998          | 80.359            | 115.000           | 0.000            | 115.000        | 103.008         | 90.630        | 92.704  | 114.852 | -        | 733.55 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | -            | 136.998          | 80.359            | 115.000           | 0.000            | 115.000        | 103.008         | 90.630        | 92.704  | 114.852 | -        | 733.55 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | -            | 136.998          | 80.359            | 115.000           | 0.000            | 115.000        | 103.008         | 90.630        | 92.704  | 114.852 | -        | 733.55 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | ourposes only. Th | he corresponding | budget request | s are documente | d elsewhere.) |         |         |          |        |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                 | -                | =              | -               | -             | -       | -       | -        | -      |

### **Description:**

PE 0207448F C2ISR TACTICAL DATA LINK

Assistant Secretary of Defense/Command, Control, Communications and Intelligence (ASD/C3I) directed implementation of the DoD Cryptographic Modernization Initiative (CMI) on 23 February 2001. Chairman, Joint Chiefs of Staff (CJCS) Notice 6510/NSA 3-9 direct the modernization of all cryptography in military systems in the US, NATO and Coalition nations. To prevent information compromise, the National Security Agency (NSA) mandate requires Link 16 cryptographic systems be upgraded. The CJCS directed a modernization effort at the recommendation of the NSA to modernize equipment and provide enhanced security for Link 16 tactical networks (Cryptographic Modernization Initiative (CM). Likewise, a radio frequency spectrum memorandum of agreement between the DoD and the Department of Transportation mandate the internal frequency remapping of our Link 16 family of terminals to avoid conflict with next generation Federal Aviation Administration radio aids to navigation. These two mandates, among other operational reliability and capability improvements will be satisfied under a Block Upgrade (BU2) effort planned for the Link 16 Multifunctional Information Distribution System (MIDS) Low Volume Terminal (LVT). BU2 will procure new Signal Message Processor (SMP) cards that incorporate the most current NSA mandated cryptographic standards. BU2 will also procure a new Tailored Processor/Ground Multiplexer card, update software and firmware in the MIDS LVT to improve operational reliability and provide the radio the ability to remap the lower frequency range of the terminal. The new cards will be installed in all terminals and spare cards will also be purchased. Crypto mod kit being developed by the Navy as part of MIDS LVT Block Upgrade 2.

PE 0208064F AIR FORCE Operational HQ-Cyber/Cyberspace Command and Control Mission System (C3MS) This program is a new start in FY18.

Provides the AFCYBER Commander with the tools necessary to effectively and efficiently plan, monitor, and execute missions in the cyber domain. This includes development and dissemination of Cyberspace Tasking Orders to ensure commander's intent is supported through the application of cyber forces using the latest intelligence. C3MS provides a common operational picture to maintain cyberspace threat activities and integrates cyberspace indications and warnings, analysis, and other actionable intelligence products into overall situational awareness, planning, and execution. In FY18 C3MS will field security patches, vendor unique patches, operating system upgrades, and DoD mandated policy updates. Funding supports capital equipment replacements/updates to maintain security posture and field updates to two locations (1 AD/1 ANG).

PE 0208088F AF DEFENSIVE CYBERSPACE OPERATIONS

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P-1 Line #11

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 |                               | <b>Date:</b> May 2017 |
|---|-------------------------------|-----------------------|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title: |                       |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 831010 / Comsec Equipment     |                       |
| Equip / BSA 1: Comm Security Equipment(Comsec)                                  |                               |                       |

ID Code (A=Service Ready), B=Not Service Ready): A Program Elements for Code B Items: 0207448F Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Provides defensive counter cyberspace capability that protects the AFNet and DoD network enclaves, to include their associated computer systems, software applications and sensitive operational information against unauthorized intrusion, corruption, and/or destruction.

#### PE 0303135F PUBLIC KEY INFRASTRUCTURE (PKI)

PKI provides identity management (IDM) services to support warfighter requirements. Air Force IDM programs align with DoD IDM efforts and support DoD IDM Roadmap and Strategic Plan. PKI provides the basic framework and services implemented within DoD to ensure information systems security. It provides the capability to attach digital signatures to electronic documents for identity management, and to encrypt and decrypt electronic documents for secure transmission. PKI-enabled applications afford confidentiality and authentication services to communications and/or network transactions, as well as verification of the data integrity and non-repudiation of those transactions. PKI is one of many security solutions used to protect information and provide attributes enabling authorization access to critical resources in the Air Force Information Networks (AFIN) and is used concurrently with other solutions. Funding supports several different requirement areas to procure infrastructure equipment for the field in support of AFIN, PKI, Evolutionary PKI End User Equipment to include multifactor authentication technologies and authorization services. The current DoD PKI token (DoD Common Access Card (CAC)) is undergoing a gradual evolution towards a higher assurance token. Additionally, Homeland Security Presidential Directive-12 (HSPD-12) mandates a common identification card across the Federal Government. Based on the HSPD-12 requirements, the National Institute of Standards and Technology (NIST) developed Federal Information Processing Standard 201 (FIPS 201) which adds security requirements to the identification card.

#### PE 0303140F INFORMATION SYSTEMS SECURITY PROGRAM:

This program funds procurement of Communications Security (COMSEC) equipment, ancillary encryption/decryption devices, and related equipment to enable the secure transport of information. ISSP delivers on rising national, DoD, and AF priorities to address cybersecurity threats and increasing warfighter dependence on cyberspace. United States Air Force (AF) and the Department of Defense (DoD) require the capability to collect, process, and disseminate an uninterrupted flow of information while denying an adversary the ability to intercept, collect, destroy, interpret, or manipulate our information flows. Secure communication allows the DoD to achieve and maintain decision superiority, the key to successful application of the military instrument of national power in modern, high-tempo, full spectrum operations. AF COMSEC equipment protects information such as, warfighter positions, mission planning, target strikes, commander's orders, intelligence, force strength, and force readiness. This COMSEC program ensures adversaries cannot interpret, manipulate, or destroy information. When an adversary is capable of interpretation, manipulation, or destruction of the information used by the warfighter, DoD military forces may suffer significant and/or devastating mission degradation that can result in loss of life and resources and/or exceptionally grave damage to national security. The COMSEC program includes equipment upgrades and replacements which incorporate latest and/or best technologies mandated to provide mission critical warfighter secure voice and data communications in tactical, strategic, and network applications for our globally-deployed COMSEC crypto assets supporting both AF and DoD missions. Details of the assets are included in each section's narrative.

#### PE 0305251F CYBERSPACE OPS AND FORCE SUPPORT

LI 831010 - Comsec Equipment

Provides training systems to support defensive counter cyberspace capability training requirements for units that protect the AFNet and DoD network enclaves, to include their associated computer systems, software applications and sensitive operational information. Also supports other procurement requirements related to all Cyber Mission Force (CMF) teams to include the Cyber Protection Teams (CPT), Combat Mission Teams (CMT), Combat Support Teams (CST), National Mission Teams (NMT) and National Protection Teams (NPTs).

Funding for this exhibit contained in PE 0207448F; PE 0208088F; PE 0303135F; PE 0303140F; PE 0305251F.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

831010 / Comsec Equipment

Equip / BSA 1: Comm Security Equipment(Comsec)

Program Elements for Code B Items: 0207448F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule                              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | OPERATIONAL HQ - CYBER                         |             | В        |                       | - / -                                    | - / 0.000                                | - / 0.000                                | - / 11.106                               | - / 0.000                                | - / 11.106                               |
| P-5             | AF DEFENSIVE CYBERSPACE OPERATIONS             |             | Α        |                       | - / -                                    | - / 13.377                               | - / 30.678                               | - / 30.586                               | - / 0.000                                | - / 30.586                               |
| P-5             | Public Key Infrastructure (PKI)                |             | Α        |                       | - / -                                    | 35,060 / 2.442                           | 67,240 / 4.005                           | - /4.120                                 | - / 0.000                                | - /4.120                                 |
| P-5             | Information Systems Security Program           |             | Α        |                       | - / -                                    | - / 117.551                              | - / 45.676                               | - / 69.188                               | - / 0.000                                | - / 69.188                               |
| P-5             | Cyberspace Operations Forces and Force Support |             | Α        |                       | - / -                                    | - /3.628                                 | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40            | Total Gross/Weapon System Cost                 |             |          |                       | - 1 -                                    | - / 136.998                              | - / 80.359                               | - / 115.000                              | - / 0.000                                | - / 115.000                              |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

This program, PE 0208064F COMSEC P-5, is a new start.

PE 0207448F C2ISR TACTICAL DATA LINK

1. LINK-16: FY16 funding was required to ensure the platforms are upgraded in time to meet the 2020 FAA mandate for frequency remapping. The radios included new Crypto Modernization required by NSA to address new re-keying capabilities. No Budget Year FY18 funding requested.

PE 0208064F AIR FORCE Operational HQ-Cyber/Cyberspace Command and Control Mission System (C3MS)

- 1 C3MS HARDWARE AND COMMERCIAL OFF-THE-SHELF SOFTWARE: FY18 funding replaces clients, servers, miscellaneous hardware, and associated software licenses for C3MS sites.
- 2. C3MS PROGRAM MANAGEMENT ADMINISTRATION (PMA): FY18 funding includes provisions for government contract oversight, technical expertise, and program office support associated with the sustainment of C3MS.
- 3. C3MS TRAINING & FIELDING: FY18 funding supports Type 1 training and fielding. As cyber operators enter the force, they will be provided with specialized training at each location.

PE 0208088F AF DEFENSIVE CYBERSPACE OPERATIONS

1. COMPUTER SECURITY ASSISTANCE PROGRAM (CSAP) COUNTERMEASURES: FY18 funding procures hardware/software necessary for vulnerability analysis, vulnerability identification, countermeasure development, and testing in an environment simulating real-world operational environment. From combat operations to social media use, network bandwidth requirements continue to explode at unprecedented rates. This ever-increasing throughput adds unparalleled threats to targeting AF cyber networks. To thwart adversary strategies, effective and innovative solutions must be implemented. These solutions provide daily support to multiple efforts including U.S. Cyber Command and other Combatant Commanders; 24th Air Force: 624 Operations Center; 67th Network Warfare Wing: 33rd Network Warfare Squadron (NWS) and 26th Network Operations Squadron (NOS); Air Force Network Integration Center, Defense Information Systems Agency, Air Force Office of Special Investigations, and other organizations that are integral to the successful performance of the 318 Cyber Operations Group (COG) mission. Threat relevant and time critical countermeasures are required to maintain the advantage against agile and capable

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LI 831010 - Comsec Equipment Air Force

P-1 Line #11

| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 |                               | <b>Date:</b> May 2017 |
|---|-------------------------------|-----------------------|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title: |                       |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 831010 / Comsec Equipment     |                       |
| Equip / BSA 1: Comm Security Equipment(Comsec)                                  |                               |                       |

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0207448F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

adversaries. Without the CSAP system, the security of AF networks may be compromised due to inadequate facilities needed to innovate, to develop and test new intrusion detection signatures and investigate new technologies and architectures being integrated into AF networks.

- 2. AFCERT: No Budget Year FY18 funding requested.
- 3. CYBERSPACE VULNERABILITY ASSESSMENT /HUNTER: FY18 funding provides a full level and an initial level of CVA/Hunter equipment (the Garrison Interceptor Platform, Mobile interceptor Platform and Deployable Interceptor Platform) to 12 Active duty Cyber Protection Teams (CPTs), six National Cyber Protection Teams (NCPTs), and six Air National Guard (ANG CPTs). Funding provides for subsystem procurements, developing system images and fielding to CPTs, and N-CPTs. Additionally the funding will provide for the recapitalization of 34 Information Operation Fly Away Kit platforms in support of Cyber Protection Teams (CPTs).
- 4. CYBER DEFENSE ANALYSIS: FY18 funding provides equipment for three RF Monitor Systems (Digital Receiver Technology) with extended warranty
- 5. Weapon System Cyber Response (WSCR): FY18 Funds supports the Defensive Cyberspace Operations Cyber Squadron Initiative (CSI) to provide Mission Defense Team (MDT) toolkits to Pathfinder Units. The Pathfinder Units' MDTs will use the Toolkit to provide cyber assurance of the Air Force's core missions. The Toolkit consist of high-performance hardware (laptops, servers and sensors) and a robust software suite that provides several critical functions: 1)Protect and Prevent Establish Baseline, ID Network Threats/Vulnerabilities, Implement Network Protection Measures and Utilize Situational Awareness Tools; 2)Monitor, Collect, Analyze, and Detect Establish Real-Time Monitoring, Detect Network Intrusion, ID Threat Indications and Warnings; 3) Incident Response/ Engagement Execute Counter-Measures, Neutralize Threat, Regain Terrain Control & Capability, Analyze, Report, and Coordinate; 4)Recovery Conclude Contingency Response, Validate Cyber Security/Compliance, and Return to the Baseline; 5)Tactical & Operational C2. The Cyberspace Vulnerability Assessment/Hunter (CVA/H) Program Management Office (PMO) established teams to procure and field the Toolkits.

#### PE 0305251F CYBERSPACE OPS AND FORCE SUPPORT

Provides training systems to support defensive counter cyberspace capability training requirements for units that protect the AFNet and DoD network enclaves, to include their associated computer systems, software applications and sensitive operational information. Also supports other procurement requirements related to all Cyber Mission Force (CMF) teams to include the Cyber Protection Teams (CPT), Combat Mission Teams (CMT), Combat Support Teams (CST), National Mission Teams (NMT) and National Protection Teams (NPTs).

#### PE 0303135F PUBLIC KEY INFRASTRUCTURE (PKI):

- 1. EVOLUTIONARY PKI END USER EQUIPMENT: FY18 funding supports PKI Identity and Access Management needs that must be procured rapidly to strengthen and defend the Air Force Information Network (AFIN) from new and evolving vulnerabilities. Funding and quantities directly support PKI-based software authentication and hardware security afforded by smartcards or other hardware methods, enabling users to authenticate securely to the network. As PKI continues to evolve, there is an increased need for alternative methods of two-factor authentication as well as the introduction of multi-factor authentication methods. The classic paradigm for authentication systems identifies three factors as the cornerstone of authentication: 1) Something you know (e.g., a password or PIN), 2) Something you have (e.g., an ID badge or a cryptographic key), and 3) Something you are (e.g., a fingerprint or biometric data). Multi-factor authentication refers to the use of more than one of the factors. The strength of authentication systems is largely determined by the number of factors incorporated by the system. While the Alternative Tokens (ALT) provide usable two factor authentication for many use cases, the sustainability of continued issuance of such hardware tokens is short-lived for several reasons. This effort will examine alternate e-authentication technologies that may provide appropriate multi-factor authentication for users, privileged users and system administrators.
- 2. AIR FORCE DIRECTORY SERVICES (AFDS): AFDS is one of three pillars of DoD Identity Management. The others are PKI and CAC. AFDS ensures that AF user identities are common and synchronized across directories and information stores of various networks, systems, and applications. AFDS eliminates the disparity of maintaining stove-piped systems and through the use of directory technology, alleviates latency associated with the sharing/replication of identity data attributes. AFDS supports delivery of an enterprise security service and backbone for AF networks (both in-garrison and tactical), by providing AF

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 |                               | <b>Date:</b> May 2017 |
|---|-------------------------------|-----------------------|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title: |                       |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 831010 / Comsec Equipment     |                       |
| Equip / BSA 1: Comm Security Equipment(Comsec)                                  |                               |                       |

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: 0207448F Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

user credentials to the AF Network Enterprise and AF system applications. AFDS addresses challenges and enhances AF mission performance through seamless integrated access to the right information anywhere, anytime. AFDS leverages and provides a core meta-directory service that "joins" and synchronizes personal identity data attributes from authoritative AF and DoD repositories for use by all AF systems and applications. FY18 funds will procure hardware, software, and support upgrades.

#### PE 0303140F INFORMATION SYSTEMS SECURITY PROGRAM:

- 1. Space COMSEC Mission: Space COMSEC procures crypto products for ground nodes that link to space assets. Space COMSEC equipment is a foundational element in achieving Air Force space and information superiority. Space COMSEC is an enabler for space system compliance with DoD I 8581.01 Information Assurance (IA) Policy for Space Systems used by the Department of Defense. Space COMSEC mission provides communications security products and lifecycle sustainment support to all DoD satellite systems and commercial systems supporting DoD missions. It enables secure Command and Control (C2) of satellites and prevents unauthorized access and destruction. It enables secure transmission of satellite system's health status telemetry data (satellite health and relative orbital position) to ground control stations, thus protecting critical information about the capabilities of DoD satellite systems. The capability of a system must be protected from an adversary to avoid exploitation of a system weakness/ limitation, knowledge of which could assist an adversary in a successful mission against DoD military forces and potential loss of life. Space COMSEC also provides secure transmission of information collected by satellite sensors, which provides the warfighter an integrated view of the battle space. Space COMSEC provides for secure SATCOM, positioning, navigation, timing, weather, nuclear detection and early warning missions. Space COMSEC also enables transmission security (TRANSEC) for space platforms. Space COMSEC mission procures crypto end items and logistics elements to support developing and operational space systems. Funding for this effort is in PE 0303140F.
- a. PRODUCTS: FY17 & FY18 funding moved to APPN 3021 Space Procurement. FY16 funding provided for the production of Space COMSEC products to meet developing and operational space program needs. Space COMSEC products include End Crypto Units (ECU), Embedment Solutions (ES), TRANSEC, and ancillaries. Due to low volume production quantities and high reliability design, Space COMSEC products can range in price from \$10K per unit to \$2M per unit. As a commodity item, Space COMSEC procures standard crypto products, which enable minimized lifecycle footprints. Space COMSEC procures from multiple crypto vendors, however, with the low volume consumption by space programs the space crypto industry base is less than a dozen companies.
- b. LOGISTICS: FY17 & FY18 funding moved to APPN 3021 Space Procurement. FY16 funding provided for the production of Space COMSEC logistics elements. Space COMSEC products typically have a 20 to 40 year life cycles to support development, launch, and operation of multiple AF and DoD space systems. Space COMSEC is provided as Government Furnished Equipment (GFE) to the space system developing contractors and operational ground stations. Space COMSEC products are high-cost critical assets. They are organically sustained to include component level maintenance exclusively by the AF. Logistics procures the necessary lifecycle sustainment elements required to meet the 40 year mission requirements. Logistics elements include specialized test sets, certified training materials and courses, maintenance manuals, provisioning, and modifications.
- 2. AIR AND GROUND (A&G) COMSEC PROGRAM: The Air and Ground COMSEC Program procures and supports a wide range of secure encryption products supporting AF, inter-service, and various DoD agency customers; and includes items approved under National Security Agency's Commercial COMSEC Evaluation Program (CCEP) such as KIV-7M, Tactical fast lane (TACLANE), and other High Assurance Internet Protocol Encryptor (HAIPE) devices. The program includes equipment upgrades and replacements that incorporate state-of-the-art technologies for mission-critical warfighter secure voice and data communications. The program provides needed upgrades to encryption devices in FY17 and FY18 to comply with NSA's Advanced Cryptographic Capabilities (ACC) directives. The program supports tactical, strategic, and network applications for globally deployed cryptologic assets supporting Air Force and DoD. Supported systems fall within Air Force Information Systems Security and Information Assurance arenas. Funding for this effort is in PE 0303140F.
- a. IN-LINE NETWORK ENCRYPTORS: Previously called "Network Encryption Systems." FY18 funding fields the new In-Line Network Encryptors (INE) required to maintain the confidentiality, data integrity, and non-repudiation of classified communications. INEs are the mainstay for securing communications used in classified terrestrial and airborne communications networks. The new INEs feature robust data encryption improvements included in the HAIPE Interoperability Specification (HAIPE IS) as well as Internet Protocol Version 6 capability that will improve security and expand the bandwidth of USAF secure Internet Protocol networks

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Air Force

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| Exhibit P-40, Budget Line Item Justification: FY 2018   | Air Force                       |   | Date: May 2017                      |
|---|---------------------------------|---|-------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity 3080F: Other Procurement, Air Force / BA 03: Electronic |                                 | P-1 Line Item Number / Titl<br>831010 / Comsec Equipmen |                                     |
| Equip / BSA 1: Comm Security Equipment(Comsec)  |                                 | COTOTO / COMOCO Equipmor                                |                                     |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B Ite | ems: 0207448F   | Other Related Program Elements: N/A |

Line Item MDAP/MAIS Code: N/A

- b. LINK ENCRYPTION FAMILY (LEF): FY18 funds provide for the replacement of the legacy LEF with new more secure crypto modernization compliant LEF devices. The LEF provides near real time secure communications for national and command level decision making authorities up to TOP SECRET SCI. The new LEF devices include more robust encryption algorithms, as well as dual channel, increased bandwidth capability, and reprogramability. NSA has issued classified instructions regarding the use of specific LEF devices.
- c. AIR AND GROUND COMSEC CONSOLIDATED: The following requirements have been combined into one line: Secure Telephones, COMSEC Acquisition Reform (CAR), Peculiar Support Equipment, Secure Communications Voice/Data, Embedded Encryption Devices, and Telemetry Encryption Devices. FY18 funds procure secure voice/data equipment, DOD Type I COMSEC equipment and commercial cryptography products, testing and support equipment, embedded COMSEC modules, and telemetry devices and Link-16. The Air and Ground COMSEC line is an aggregate of numerous items. Each year the type and/or quantity of items utilized to meet requirements varies; an average unit cost is based on number/type of units planned for purchase.
- 3. CRYPTOGRAPHIC MODERNIZATION: The DoD is transforming its existing operational capabilities to realize a seamless joint network of information and engagement grids that securely link sensors, command and control cells, and tactical units to support current and future warfighting capabilities. This includes cryptographic devices that are more robust, modular, scalable, capable, net-centric, and durable allowing more effective and efficient performance including reduced inventory, expanded data rates, simplified upgrades, reduced costs, and ensured Global Information Grid-compatibility. The Global Information Grid (GIG) requires a transformed cryptographic inventory. The DoD Cryptographic Modernization (CM) Initiative delivers that inventory, ensuring a strong security posture for national security and tactical communications systems by providing transparent cryptographic capabilities consistent with operational imperatives. National Security Agency mandates, and mission environments. The future inventory will provide security devices that ease logistics, support joint interoperability, improve interoperability with allies and coalition partners, enable network-centric and transparent key/equipment management, and allow effective future upgrades. These CM programs enable information dominance by developing and procuring communications security devices that deter and deny known and emerging threats while accommodating significantly increased bandwidths and processing speeds without increasing communication transient and information holding risk. Current CM programs will ensure modernized, secure communications capability to VINSON/ANDVT radios, the Identification Friend Foe (IFF) Mode 5 system, a Remote ReKey system for multiple Homeland Defense and other radar sites, the few remaining, unmodernized-Nuclear Command and Control (NC2) networks, and miniaturized crypto for small unmanned systems. Current programs will replace/upgrade over 30.000 devices out of the Air Force's 245.000+ crypto devices and provided over 100,000 new devices where none were previously available. Other programs are undergoing development under the auspices of this line of this PE in order to meet emerging COMSEC requirements for Key Management Infrastructure compatibility, as well as various enterprise-wide technological upgrades mandated under the National Security Agency assessments and Policy #3-9 Cryptographic Modernization Initiative Requirements for Type 1 Cryptographic Products. Funding for this effort is in PE 0303140F.
- a. IDENTIFICATION FRIEND OR FOE (IFF) MODE 5 CRYPTO MODERNIZATION: This program developed and is procuring devices to encrypt/decrypt IFF Mode 4 and Mode 5 interrogator and transponder operations. These devices, built to Air Traffic Control Radar Beacon System (ATCRBS), IFF, Mark XIIA, System (AIMS) 04-900 Cryptographic Interface Standard, are integrated into all airborne platforms and ground radar applications to provide critical, immediate tactical aircraft identification data to ground and airborne systems. Procurement of the two primary devices, KIV-77 and KIV-78, concluded in FY15 for the KIV-78 and will conclude in FY18 for KIV-77 (required to outfit most of the USAF fleet) and a remote form factor for certain C2 AF aircraft:
- (1), KIV-78 DEVICES: The FY18 funding procured the technical support and travel CLINS for the KIV-78s, KIV-78 is a cryptographic device developed by the USAF in conjunction with Navy IFF Mode 5 upgrades for USAF F-16s and U.S. Navy /U.S. Marine Corps F /A-18s.
- (2) KIV-77 DEVICES: The FY18 funding procures KIV-77s. KIV-77 is a cryptographic device developed by the USAF to integrate into the APX-119 IFF host box used in the majority of USAF aircraft and ground surveillance/control systems.
- b. REMOTE REKEY (RRK) (CI-33) DEVICES: The RRK modernization program, a part of the AF Key Management Enterprise (KME), will include the current CI-13 capabilities, expand ability to store keying material and rekey other cryptographic devices, and add capability to key/rekey the new Identification Friend or Foe Mode 5 system. RRK uses existing Defense Information Systems Network (DISN) infrastructure communications to distribute key material produced via the Electronic Key Management System (EKMS) or the Key Management Infrastructure (KMI) capabilities, to manage the distribution network, and to configure/status remote End Cryptographic Units (ECUs). FY18 funding procures and installs devices at 36 additional sites.
- c. VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM): FY18 funds support the VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) program. VACM is an element of the USAF CM Program designed to replace the legacy capability on VINSON/ANDVT secure voice communications on aircraft, ships, and ground fixed and mobile platforms including critical Nuclear Command and Control

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 |                               | <b>Date:</b> May 2017 |
|---|-------------------------------|-----------------------|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title: |                       |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 831010 / Comsec Equipment     |                       |
| Equip / BSA 1: Comm Security Equipment(Comsec)                                  |                               |                       |

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0207448F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

(NC2) and other Top Secret and Secret networks (Devices: KY-57/58,KY-99/100 and USC-43). The VACM Embedded Project upgrades the Baseband Input/Output (BBIO) module as a permanent modification of the ARC-234.

- (1) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) COMPONENTS (ARC-234): The VACM Embedded Project was established to modernize cryptographic devices that are integrated within various Vinson/ANDVT radios. The BBIO module performs COMSEC functions for the ARC-234. The Permanent Sustainment Modification of the ARC-234 will retain Embedded Communications Security (COMSEC) capability by upgrading the BBIO module with reprogrammable hardware and modern crypto algorithms.
- (1a) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) COMPONENTS (ARC-234), Installation: The upgraded BBIOs will be installed/modified into the ARC-234 radios.
- (2) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) DEVICES: The VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) program is procuring devices. The production line will replace five crypto device types on critical national leadership networks including airborne, ground and mobile platforms.
- d. Missile Electronic Encryption Device (MEED): The MEED Modification will use FY18 funds to procure the upgraded legacy Missile Entry Control System (MECS) devices used to securely authenticate personnel attempting access to this Nation's ground-based Intercontinental Ballistic Missile (ICBM) facilities. This effort will bring the MEED equipment into compliance with current NSA information assurance (IA) security design guidance.
- e. Technology Development (TD): Technical Development (TD) conducts concept development and early systems engineering activities to analyze evolving threats and Communications Security (COMSEC) capability gaps across AF mission areas. Develops, plans and executes foundational technology maturation efforts to inform COMSEC requirements, build capability roadmaps and support cost estimates prior to Materiel Development Decision (MDD). Mitigates risk for thousands of AF users affected by algorithm security issues and ensures required security upgrades can be integrated into the AF enterprise. Works with NSA and other services to develop standards that increase security of communication and information products and facilitate efficient crypto and COMSEC enterprise management.

#### FY18 Plans:

- (1) Distributed Common Ground System (DCGS) Crypto
- (2) Classified Data at Rest (CDAR) Crypto: Continued procurement of legacy encryption solutions for application to unprotected legacy Air Force platforms.
- (3) Trusted Sensor (TS) Crypto: Completion of procurement of Trusted Sensor network encryptors with software package enabling intrusion detection on classified and unclassified networks by CVA Hunter weapon system.
- (4) Integrated Data Denial (IDD) Crypto: No action planned
- (5) Advanced Crypto Capabilities (ACC): Planned modification activity in support of KG-245A.
- (6) COMSEC/CCI Tracking tool: Accountability of COMSEC items
- f. PROGRAM MANAGEMENT ADMINISTRATION (PMA): FY18 program management administration funding supports management with engineering and technical expertise in support of development and procurement activities.
- g. CLASSIFIED DATA AT REST (CDAR): CDAR will initially support four use cases that have been identified as high priority by CYSS and NSA: Hard Disk (HDD) transfer, Large Manned ISR Platforms, Remotely Piloted Aircraft/Pods/Payloads, and Manned Tactical. Pending results of an Alternative of Analysis, two of the four use cases may be solvable by the procurement of off-the-shelf encryption products.
- h. TRUSTED SENSOR (see item 3 under TD for description)

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|--|---|--|--|
| Exhibit P-40, Budget Line Item Justification: FY 20  | 18 Air Force  |  | Date: May 2017   |
| Appropriation / Budget Activity / Budget Sub Activity 3080F: Other Procurement, Air Force / BA 03: Electron Equip / BSA 1: Comm Security Equipment(Comsec) |   | P-1 Line Item Nu<br>831010 / Comsec  |  |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It  | ems: 0207448F  | Other Related Program Elements: N/A  |
| Line Item MDAP/MAIS Code: N/A  |   |  |  |
|  | ographic capability and transmit in the   |  | Below (SaB) Command and Control (C2) and mission data for Size, Weight, and ion has a self-generating key which removes the requirement for pre-placed keys  |
| Program to provide secure, flexible, and timely upgrades to cryptog  | raphic key generation, distribution, an   | d management system  | orise (KME), a sustainment program that works in concert with the DoD EKMS is. AFEKMS sustains the current Electronic Key Management System and serves cts required under the COMSEC Material Control System (CMCS). Funding for this  |
| a. TECHNICAL UPDATES: FY18 funding procures hardware and so an audit trail for COMSEC materials.   | oftware products necessary to update  | the Tier 1 Net Key Ser   | vers, Tier 3 system data management devices (DMDs); and systems to maintain  |
| b. KOV-21 CARDS & REFRESH: F18 funding procures KOV-21 car<br>Equipment Replacement began in FY10 and will continue until the A                            |   |  | DV-21 cards life expectancy is approximately 7-11 years depending on use. Capita   |
|  | r years (end-of-life due to KOV-21 car  | d). Disruption of the Sk   | items that are mission essential to load Crypto key into various platforms. SKLs (L delivery schedule could degrade and/or disrupt secure communications in the is fielded.  |
| portion of the AF Key Management Enterprise (KME) with the DoD software within the AF to provide mission critical Communications S                         | Key Management Infrastructure (KMI<br>Security support for all AF mission and<br>que/certified products (Tier 2/3) to rep | ). The Air Force KMI tr<br>I platforms implementin<br>lace legacy AFEKMS e | ement of the legacy Air Force Electronic Key Management System (AFEKMS) ansition activity procures and deploys the DoD KMI training, equipment and g the core capability for the AF's future KME. The AF KMI transition activity quipment per National Security Agency (NSA) mandates and to field KMI-enabled |
|  |   |  | Key Processors (AKPs) that provide the cryptographic capability to interact with 29 Type 1 Tokens that provide secure user identification/authentication to the KMI.   |
| b. KMI Last Mile Production (Tier 3): FY18 funding procures latest   | generation Tier 3 devices (SKLs/TKL   | s) and hardware/softwa   | are management and support capabilities to satisfy the KMI Last Mile requirement.  |
| PE 0305251F CYBERSPACE OPS FORCES AND FORCE SUPPO  | ORT CYBERSPACE VULNERABILITY  | ASSESSMENT (CVA  | TRAINING SUITE: No funding in FY18.  |
|  |   |  |  |
|  |   |  |  |
|  |   |  |  |

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Exhibit P-5, Cost Analysis: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 3080F / 03 / 1 831010 / Comsec Equipment - / OPERATIONAL HQ - CYBER

| ID Code (A=Service Ready, B=Not Service Ready): B        |                             | M                        | DAP/MAIS Code:             |                     |             |               |
|--|-----------------------------|--------------------------|----------------------------|---------------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                  | FY 2017                    | <b>FY 2018 Base</b> | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | -                        | -                          | -                   | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 0.000                    | 0.000                      | 11.106              | 0.000       | 11.106        |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                        | -                          | -                   | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 0.000                    | 0.000                      | 11.106              | 0.000       | 11.106        |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                        | -                          | -                   | -           | -             |
| Total Obligation Authority (\$ in Millions)              | -                           | 0.000                    | 0.000                      | 11.106              | 0.000       | 11.106        |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reques | ts are documented elsewher | re.)                |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                        | -                          | -                   | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | -                        | -                          | -                   | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | F            | Prior Years   | S                       |           | FY 2016       |                         |           | FY 2017              |                         | FY        | / 2018 Ba     | se                      | FY 2018 OCO |               |                         | FY 2018 Total |                      |                         |
|--|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-------------|---------------|-------------------------|---------------|----------------------|-------------------------|
| Cost Elements  | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - OPERATIONAL H                                   | IQ - CYBER C | ost           | '                       | '         | '             |                         |           |                      |                         |           |               | '                       |             |               |                         |               |                      |                         |
| Recurring Cost   | _            |               |                         |           |               |                         |           |                      |                         |           |               |                         |             |               |                         |               |                      |                         |
| 1. HARDWARE<br>AND COMMERCIAL<br>OFF THE SHELF<br>SOFTWARE | -            | -             | -                       | -         | -             | -                       | -         | -                    | -                       | 9.007     | 1             | 9.007                   | -           | -             | -                       | 9.007         | 1                    | 9.007                   |
| 2. PROGRAM<br>MANAGEMENT<br>ADMINISTRATION<br>(PMA)        | -            | -             | -                       | -         | -             | -                       | -         | -                    | -                       | -         | -             | 1.099                   | -           | -             | -                       | -             | -                    | 1.099                   |
| 3. TRAINING and FIELDING                                   | -            | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -             | 1.000                   | -           | -             | 0.000                   | -             | -                    | 1.000                   |
| Subtotal: Recurring Cost                                   | -            | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -             | 11.106                  | -           | -             | 0.000                   | -             | -                    | 11.106                  |
| Subtotal: Hardware -<br>OPERATIONAL HQ -<br>CYBER Cost     | -            | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -             | 11.106                  | -           | -             | 0.000                   | -             | -                    | 11.106                  |
| Gross/Weapon System<br>Cost                                | -            | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -             | 11.106                  | -           | -             | 0.000                   | -             | -                    | 11.106                  |

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Exhibit P-5, Cost Analysis: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 3080F / 03 / 1

831010 / Comsec Equipment

- / AF DEFENSIVE CYBERSPACE **OPERATIONS** 

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MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): A **Prior Years FY 2018 Base FY 2016 FY 2018 OCO** FY 2018 Total **Resource Summary** FY 2017 Procurement Quantity (Units in Each) 13.377 Gross/Weapon System Cost (\$ in Millions) -30.678 30.586 0.000 30.586 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 13.377 30.678 30.586 0.000 30.586 -Plus CY Advance Procurement (\$ in Millions) \_ Total Obligation Authority (\$ in Millions) 30.678 30.586 13.377 30.586 0.000 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions)

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Gross/Weapon System Unit Cost (\$ in Millions)

|   | Prior Years |                      |                         |           | FY 2016              |                         |           | FY 2017       |                         | FY        | ' 2018 Bas           | se                      | FY        | <sup>2018</sup> OC | :0                      | FY        | ' 2018 Tot    | .al                     |
|---|-------------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|--------------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements   | Unit Cost   | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)      | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - 0208088F COMS                                    | EC Cost     |                      |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                    |                         |           |               |                         |
| Recurring Cost  |             |                      |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                    |                         |           |               |                         |
| Cyberspace<br>Vulnerability<br>Assessment/Hunter            | -           | -                    | -                       | 4.349     | 2                    | 8.698                   | 4.970     | 4             | 19.878                  | 2.300     | 9                    | 20.703                  | -         | -                  | 0.000                   | 2.300     | 9             | 20.7                    |
| Computer Security Assistance Program (CSAP) Countermeasures | -           | -                    | -                       | 0.461     | 5                    | 2.305                   | 0.463     | 5             | 2.314                   | 0.475     | 5                    | 2.377                   | -         | -                  | -                       | 0.475     | 5             | 2.3                     |
| AFCERT Upgrade<br>Sensors                                   | -           | -                    | -                       | 0.039     | 2                    | 0.077                   | 0.039     | 2             | 0.077                   | -         | -                    | -                       | -         | -                  | -                       | -         | -             |                         |
| AFCERT Upgrade<br>Switch                                    | -           | -                    | -                       | 0.045     | 2                    | 0.089                   | 0.045     | 2             | 0.089                   | -         | -                    | -                       | -         | -                  | -                       | -         | -             |                         |
| AFCERT Virtual<br>Private Network (VPN<br>Module)           | -           | -                    | -                       | 0.036     | 2                    | 0.072                   | 0.038     | 2             | 0.076                   | -         | -                    | -                       | -         | -                  | -                       | -         | -             |                         |
| Cyberspace Defense<br>Analysis                              | -           | -                    | -                       | 1.068     | 2                    | 2.136                   | 0.081     | 3             | 0.244                   | 1.313     | 3                    | 3.940                   | -         | -                  | -                       | 1.313     | 3             | 3.9                     |
| WSCR  | -           | -                    | -                       | -         | -                    | -                       | 0.250     | 32            | 8.000                   | 0.238     | 15                   | 3.566                   | -         | -                  | -                       | 0.238     | 15            | 3.50                    |
| Subtotal: Recurring Cost                                    | -           | -                    | -                       | -         | -                    | 13.377                  | -         | -             | 30.678                  | -         | -                    | 30.586                  | -         | -                  | 0.000                   | -         | -             | 30.5                    |
| cubtotal: Hardware -<br>208088F COMSEC Cost                 | -           | -                    | -                       | -         | -                    | 13.377                  | -         | -             | 30.678                  | -         | -                    | 30.586                  | -         | -                  | 0.000                   | -         | -             | 30.5                    |
| iross/Weapon System   | -           | -                    | -                       | -         | -                    | 13.377                  | -         | -             | 30.678                  | -         | -                    | 30.586                  | -         | -                  | 0.000                   | -         | -             | 30.58                   |

**Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 3080F / 03 / 1 831010 / Comsec Equipment - / Public Key Infrastructure (PKI)

| ID Code (A=Service Ready, B=Not Service Ready): A        |                             | М                         |                           |              |             |               |
|--|-----------------------------|---------------------------|---------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                   | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | 35,060                    | 67,240                    | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 2.442                     | 4.005                     | 4.120        | 0.000       | 4.120         |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 2.442                     | 4.005                     | 4.120        | 0.000       | 4.120         |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)              | -                           | 2.442                     | 4.005                     | 4.120        | 0.000       | 4.120         |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget request | s are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                         | -                         | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | 0.000                     | 0.000                     | -            | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | P         | Prior Years          | S                       |           | FY 2016              |                         |           | FY 2017              |                         | F۱        | ′ 2018 Bas           | se                      | FY 2018 OCO |               |                         | FY 2018 Total |                   |                         |
|--|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-------------|---------------|-------------------------|---------------|-------------------|-------------------------|
| Cost Elements                                | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) |
| Hardware - 0303135F COMS                     | EC Cost   |                      | '                       | '         | ,                    |                         |           | '                    |                         | '         |                      |                         | '           |               |                         | '             |                   |                         |
| Recurring Cost                               |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |             |               |                         |               |                   |                         |
| 1. EVOLUTIONARY<br>PKI END USER<br>EQUIPMENT | -         | -                    | -                       | 0.000     | 35,060               | 1.753                   | 0.000     | 67,240               | 3.334                   | 0.000     | 67,880               | 3.426                   | -           | -             | 0.000                   | 0.000         | 67,880            | 3.42                    |
| 2. AIR FORCE<br>DIRECTORY<br>SERVICES        | -         | -                    | -                       | 0.138     | 5                    | 0.689                   | 0.134     | 5                    | 0.671                   | 0.139     | 5                    | 0.694                   | -           | -             | -                       | 0.139         | 5                 | 0.69                    |
| Subtotal: Recurring Cost                     | -         | -                    | -                       | -         | -                    | 2.442                   | -         | -                    | 4.005                   | -         | -                    | 4.120                   | -           | -             | 0.000                   | -             | -                 | 4.12                    |
| Subtotal: Hardware -<br>0303135F COMSEC Cost | -         | -                    | -                       | -         | -                    | 2.442                   | -         | -                    | 4.005                   | -         | -                    | 4.120                   | -           | -             | 0.000                   | -             | -                 | 4.12                    |
| Gross/Weapon System<br>Cost                  | -         | -                    | -                       | 0.000     | 35,060               | 2.442                   | 0.000     | 67,240               | 4.005                   | -         | -                    | 4.120                   | -           | -             | 0.000                   | -             | -                 | 4.12                    |

| Exhibit P-5, Cost  | Analysis          | s: FY 20      | 18 Air Fo               | orce            |                 |                      |              |                          |                         |              |               |                          | I            | Date: M       | ay 2017                 |            |                     |                       |
|--|-------------------|---------------|-------------------------|-----------------|-----------------|----------------------|--------------|--------------------------|-------------------------|--------------|---------------|--------------------------|--------------|---------------|-------------------------|------------|---------------------|-----------------------|
| Appropriation / B<br>3080F / 03 / 1  | udget A           | ctivity /     | Budget                  | Sub Acti        | vity:           | I                    |              | <b>Numbe</b><br>nsec Equ |                         |              |               |                          |              |               |                         | itle [DOI  | DIC]:<br>ecurity Pi | rogram                |
| ID Code (A=Service Read  | ly, B=Not Servi   | ce Ready):    | Α                       |                 |                 |                      |              |                          | М                       | DAP/MAIS     | Code:         |                          | I            |               |                         |            |                     |                       |
| F  | Resource          | Summa         | arv                     |                 | F               | Prior Yea            | ars          | FY 20                    | 16                      | FY           | 2017          | FY 2                     | FY 2018 Base |               | Y 2018 (                | ОСО        | FY 2018 Tota        |                       |
| Procurement Quantity (Unit   |                   |               | ,                       |                 |                 |                      | -            |                          |                         |              |               |                          |              | _             |                         |            |                     |                       |
| Gross/Weapon System Co   |                   | s)            |                         |                 |                 |                      | -            |                          | 117.551                 |              | 45.67         | 6                        | 69           | 0.188         |                         | 0.000      |                     | 69.18                 |
| Less PY Advance Procure  | •                 | ·             |                         |                 |                 |                      | -            |                          | -                       |              |               |                          |              | -             |                         | -          |                     | -                     |
| Net Procurement (P-1) (\$ ii   | •                 |               |                         |                 |                 |                      | -            |                          | 117.551                 |              | 45.67         | 6                        | 69           | 0.188         |                         | 0.000      |                     | 69.18                 |
| Plus CY Advance Procure  |                   | lions)        |                         |                 |                 |                      | -            |                          | -                       |              | -             |                          |              | -             |                         | -          |                     | -                     |
| Total Obligation Authorit  | •                 |               |                         |                 |                 |                      | -            |                          | 117.551                 |              | 45.67         | 6                        | 69           | .188          |                         | 0.000      |                     | 69.18                 |
| (Tř  | ne following l    | Resource Su   | ımmary row              | s are for infor | mational pu     | rposes only          | . The corres | ponding bud              | get request             | s are docume | ented elsewh  | nere.)                   |              |               |                         |            |                     |                       |
| Initial Spares (\$ in Millions)  |                   |               |                         |                 |                 |                      | -            |                          | -                       |              | -             |                          |              | -             |                         | -          |                     | -                     |
| Gross/Weapon System Ur   | nit Cost (\$ in I | Millions)     |                         |                 |                 |                      | -            |                          | -                       |              | -             |                          |              | -             |                         | -          |                     | -                     |
|  |                   |               |                         |                 |                 |                      |              |                          |                         |              |               |                          |              |               |                         |            |                     |                       |
| Note: Subtotals or Totals in   | n this Exhibit    | P-5 may no    | t be exact o            | r sum exactly   | due to rou      | nding.               |              |                          |                         |              |               |                          |              |               |                         |            |                     |                       |
|  | F                 | rior Years    | 5                       |                 | FY 2016         |                      |              | FY 2017                  |                         | FY           | 2018 Bas      | е                        | F۱           | 2018 OC       | o                       | FY 2018 To |                     | al                    |
| Cost Elements  | Unit Cost         | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost       | Qty<br>(Each)   | Total<br>Cost        | Unit Cost    | Qty<br>(Each)            | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M)  | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each)       | Total<br>Cost         |
| Hardware - 1. SPACE COMSI  | (, ,              |               | (+)                     | (+)             | (===-/          | (+)                  | (+)          | (===:/                   | (+)                     | (+)          | (===-/        | (+)                      | (+)          | (====)        | (+)                     | (+)        | (===:)              | (+)                   |
| Recurring Cost   |                   |               |                         |                 |                 |                      |              |                          |                         |              |               |                          |              |               |                         |            |                     |                       |
| a. PRODUCTS  | -                 | -             | -                       | 0.017           | 1,192           | 20.645               | -            | -                        | 0.000                   | -            | -             | -                        | -            | -             | -                       | -          | -                   | -                     |
| b. LOGISTICS   | -                 | -             | -                       | 2.911           | 7               | 20.377               | -            | -                        | -                       | -            | -             | -                        | -            | -             | -                       | -          | -                   | -                     |
| Subtotal: Recurring Cost   | -                 | -             | -                       | -               | -               | 41.022               | -            | -                        | 0.000                   | -            | -             | -                        | -            | -             | -                       | -          |                     | -                     |
| Subtotal: Hardware - 1.<br>SPACE COMSEC (PE<br>0303140F Cost   | -                 | -             | -                       | -               | -               | 41.022               | -            | -                        | 0.000                   | -            | -             | -                        | -            | -             | -                       | -          | -                   | -                     |
| Hardware - 2. AIR and GROU   | ND COMSEC         | (PE 0303140F  | -) Cost                 | '               |                 |                      |              |                          |                         |              |               |                          |              |               |                         | '          |                     |                       |
| Recurring Cost   |                   |               |                         |                 |                 |                      |              |                          |                         |              |               |                          |              |               |                         |            |                     |                       |
|  |                   |               |                         |                 |                 |                      |              |                          |                         |              |               |                          |              |               |                         |            |                     |                       |
| a. IN-LINE NETWORK<br>ENCRYPTORS   | -                 | -             | -                       | 0.029           | 627             | 18.475               | 0.016        | 429                      | 6.894                   | 0.016        | 503           | 8.089                    | -            | -             | -                       | 0.016      | 503                 | 8.08                  |
|  | -                 | -             | -                       | 0.029           | 627             | 18.475               | 0.016        | 429                      | 6.894                   | 0.016        | 503           | 8.089                    | -            | -             | -                       | 0.016      | 503<br>444          |                       |
| ENCRYPTORS b. LINK ENCRYPTION FAMILY c. AIR AND GROUND CONSOLIDATED  | -                 | -             | -                       |                 |                 | 18.475<br>-<br>5.990 |              | 429<br>-<br>565          | 6.894                   |              |               |                          |              |               | -                       |            |                     | 8.08<br>3.95<br>4.29  |
| ENCRYPTORS b. LINK ENCRYPTION FAMILY c. AIR AND GROUND CONSOLIDATED Subtotal: Recurring Cost   |                   | -<br>-<br>-   |                         | -               | -               | -                    | -            | -                        | -                       | 0.009        | 444           | 3.955                    | -<br>-<br>-  |               |                         | 0.009      | 444                 | 3.95                  |
| ENCRYPTORS b. LINK ENCRYPTION FAMILY c. AIR AND GROUND CONSOLIDATED  | -                 | -             | -                       | 0.002           | -<br>2,512      | 5.990                | 0.003        | - 565                    | 1.470                   | 0.009        | 1,651         | 3.955<br>4.298           | -            | -             | -                       | 0.009      | 1,651               | 3.95<br>4.29<br>16.34 |
| ENCRYPTORS b. LINK ENCRYPTION FAMILY c. AIR AND GROUND CONSOLIDATED Subtotal: Recurring Cost Subtotal: Hardware - 2. AIR and GROUND COMSEC                     | -                 | -             | -                       | 0.002           | -<br>2,512<br>- | 5.990<br>24.465      | 0.003        | - 565                    | 1.470<br>8.364          | 0.009        | 1,651<br>-    | 3.955<br>4.298<br>16.342 | -            | -             | -                       | 0.009      | 1,651<br>-          | 3.95<br>4.29          |
| ENCRYPTORS b. LINK ENCRYPTION FAMILY c. AIR AND GROUND CONSOLIDATED  Subtotal: Recurring Cost Subtotal: Hardware - 2. AIR and GROUND COMSEC (PE 0303140F) Cost | -                 | -             | -                       | 0.002           | -<br>2,512<br>- | 5.990<br>24.465      | 0.003        | - 565                    | 1.470<br>8.364          | 0.009        | 1,651<br>-    | 3.955<br>4.298<br>16.342 | -            | -             | -                       | 0.009      | 1,651<br>-          | 3.95<br>4.29<br>16.34 |

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P-1 Line #11

Exhibit P-5, Cost Analysis: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1

P-1 Line Item Number / Title: 831010 / Comsec Equipment

Item Number / Title [DODIC]:

- I Information Systems Security Program

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | F         | Prior Years   | s                       |           | FY 2016       |                         |           | FY 2017       |                         | F۱        | / 2018 Bas        | se                      | FY        | / 2018 OC     | 0                       | FY        | 2018 Tota     | al                      |
|---|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|-------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements   | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| b. REMOTE REKEY<br>(RRK) (CI-33)<br>DEVICES   | -         | -             | -                       | -         | -             | 1.923                   | -         | -             | 0.815                   | 0.412     | 36                | 14.840                  | -         | -             | -                       | 0.412     | 36            | 14.8                    |
| c. (1) VINSON/ANDVT<br>CRYPTOGRAPHIC<br>MODERNIZATION<br>(VACM)<br>COMPONENTS<br>(ARC-234)                      | -         | -             | -                       | 0.025     | 201           | 5.014                   | 0.020     | 106           | 2.100                   | 0.021     | 12                | 0.250                   | -         | -             | -                       | 0.021     | 12            | 0.2                     |
| c. (1a) VINSON/<br>ANDVT<br>CRYPTOGRAPHIC<br>MODERNIZATION<br>(VACM)<br>COMPONENTS<br>(ARC-234)<br>INSTALLATION |           | -             | -                       | 0.012     | 101           | 1.184                   | 0.020     | 384           | 7.694                   | -         |                   | -                       | -         | -             | -                       | -         | -             |                         |
| c. (2) VINSON/ANDVT<br>CRYPTOGRAPHIC<br>MODERNIZATION<br>(VACM) DEVICES   | -         | -             | -                       | 0.011     | 1,823         | 20.069                  | 0.011     | 557           | 6.133                   | 0.012     | 1,216             | 14.600                  | -         | -             | -                       | 0.012     | 1,216         | 14.6                    |
| d. MISSILE<br>ELECTRONIC<br>ENCRYPTION<br>DEVICES (MEED)  | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | -                       | 0.011     | 320               | 3.502                   | -         | -             | -                       | 0.011     | 320           | 3.                      |
| e. PROGRAM<br>MANAGEMENT<br>(PMA)   | -         | -             | -                       | -         | -             | 7.437                   | -         | -             | 4.360                   | -         | -                 | 3.389                   | -         | -             | -                       | -         | -             | 3.                      |
| f. DISTRIBUTED<br>GROUND COMM<br>SYSTEM (DGCS)  | -         | -             | -                       | -         | -             | 4.645                   | -         | -             | -                       | -         | -                 | -                       | -         | -             | -                       | -         | -             |                         |
| g. CLASSIFIED DATA<br>AT REST (CDAR)  | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | -                       | -         | -                 | 0.000                   | -         | -             | -                       | -         | -             | 0.                      |
| h. TRUSTED<br>SENSORS   | -         | -             | -                       | 0.020     | 74            | 1.500                   | -         | -             | -                       | -         | -                 | -                       | -         | -             | -                       | -         | -             |                         |
| I. MINI CRYPTO  | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 0.003     | 1,191             | 3.050                   | -         | -             | -                       | 0.003     | 1,191         | 3.                      |
| a (2) KIV-77  | -         | -             | -                       | 0.041     | 5             | 0.207                   | 0.062     | 17            | 1.058                   | 0.061     | 17                | 1.037                   | -         | -             | -                       | 0.061     | 17            | 1.                      |
| Subtotal: Recurring Cost  | -         | -             | -                       | -         | -             | 42.621                  | -         | -             | 22.655                  | -         | -                 | 41.101                  | -         | -             | -                       | -         | -             | 41.                     |
| ubtotal: Hardware -<br>CRYPTOGRAPHIC<br>IODERNIZATION (PE<br>303140F) Cost                                      | -         | -             | -                       | -         | -             | 42.621                  | -         | -             | 22.655                  | -         | -                 | 41.101                  | -         | -             | -                       | -         | -             | 41.                     |

Recurring Cost

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P-1 Line #11

LI 831010 - Comsec Equipment Air Force

Exhibit P-5, Cost Analysis: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

3080F / 03 / 1

831010 / Comsec Equipment

- I Information Systems Security Program

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | F            | Prior Years   | S                       |           | FY 2016              |                         |           | FY 2017       |                         | FY        | / 2018 Bas           | se                      | F         | <b>/ 2018 OC</b> | 0                       | FY        | <b>′ 2018 Tot</b> | al                      |
|---|--------------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|------------------|-------------------------|-----------|-------------------|-------------------------|
| Cost Elements   | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)    | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)     | Total<br>Cost<br>(\$ M) |
| a. TECHNICAL<br>UPDATES                               | -            | -             | -                       | -         | -                    | 1.282                   | -         | -             | 1.049                   | -         | -                    | 0.714                   | -         | -                | -                       | -         | -                 | 0.714                   |
| b. SIMPLE KEY<br>LOADER (SKL) and<br>REFRESH          | -            | -             | -                       | 0.003     | 1,236                | 3.709                   | 0.003     | 3,153         | 9.460                   | 0.003     | 784                  | 2.352                   | -         | -                | -                       | 0.003     | 784               | 2.352                   |
| Subtotal: Recurring Cost                              | -            | -             | -                       | -         | -                    | 4.991                   | -         | -             | 10.509                  | -         | -                    | 3.066                   | -         | -                | -                       | -         | -                 | 3.066                   |
| Subtotal: Hardware - 4. AF<br>EKMS (PE 0303140F) Cost | -            | -             | -                       | -         | -                    | 4.991                   | -         | -             | 10.509                  | -         | -                    | 3.066                   | -         | -                | -                       | -         | -                 | 3.066                   |
| Hardware - 5. AF KMI (PE 03                           | 03140F) Cost |               |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                  |                         |           |                   |                         |
| Recurring Cost  |              |               |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                  |                         |           |                   |                         |
| a. KMI HARDWARE                                       | -            | -             | -                       | 0.022     | 202                  | 4.452                   | 0.032     | 130           | 4.148                   | 0.006     | 65                   | 0.360                   | -         | -                | 0.000                   | 0.006     | 65                | 0.360                   |
| b. KMI Last Mile<br>Production                        | -            | -             | -                       | -         | -                    | -                       | -         | -             | -                       | 0.003     | 2,773                | 8.319                   | -         | -                | -                       | 0.003     | 2,773             | 8.319                   |
| Subtotal: Recurring Cost                              | -            | -             | -                       | -         | -                    | 4.452                   | -         | -             | 4.148                   | -         | -                    | 8.679                   | -         | -                | 0.000                   | -         | -                 | 8.679                   |
| Subtotal: Hardware - 5. AF<br>KMI (PE 0303140F) Cost  | -            | -             | -                       | -         | -                    | 4.452                   | -         | -             | 4.148                   | -         | -                    | 8.679                   | -         | -                | 0.000                   | -         | -                 | 8.679                   |
| Gross/Weapon System<br>Cost                           | -            | -             | -                       | -         | -                    | 117.551                 | -         | -             | 45.676                  | -         | -                    | 69.188                  | -         | -                | 0.000                   | -         | -                 | 69.188                  |

#### Remarks:

COMSEC Equipment is procured as a centrally managed item using 3080.

LI 831010 - Comsec Equipment Air Force

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P-1 Line #11

| Exhibit P-5, Cost Analysis: FY 2018 Air Force                         |   |                 | Date: May 2017  |
|---|---|-----------------|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1 | P-1 Line Item Number / Titl<br>831010 / Comsec Equipmen |                 | Item Number / Title [DODIC]: - / Cyberspace Operations Forces and Force Support |
| ID Code (A=Service Ready, B=Not Service Ready): A                     |   | MDAP/MAIS Code: |   |

FY 2016

FY 2017

**Prior Years** 

FY 2018 Base

**FY 2018 OCO** 

FY 2018 Total

| Initial Spares (\$ in Millions)                          | -                           | -                         | -                         | -     | -     | -     |
|--|-----------------------------|---------------------------|---------------------------|-------|-------|-------|
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget request | s are documented elsewher | re.)  |       |       |
| Total Obligation Authority (\$ in Millions)              | -                           | 3.628                     | 0.000                     | 0.000 | 0.000 | 0.000 |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -     | -     | -     |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 3.628                     | 0.000                     | 0.000 | 0.000 | 0.000 |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -     | -     | -     |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 3.628                     | 0.000                     | 0.000 | 0.000 | 0.000 |
| Procurement Quantity (Units in Each)                     | -                           | -                         | -                         | -     | -     | -     |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

**Resource Summary** 

Gross/Weapon System Unit Cost (\$ in Millions)

|  | P         | rior Years    | S                       |           | FY 2016              |                         |           | FY 2017       |                         | F         | / 2018 Ba     | se                      | F         | / 2018 OC     | 0                       | F         | 2018 Tot      | tal                     |
|--|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements  | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - 0305251F Cost   |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Recurring Cost   |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               | _                       |
| Cyber Vulnerability<br>Assessment/Hunter<br>(CVA/H) Training<br>System | -         | -             | -                       | 3.628     | 1                    | 3.628                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Subtotal: Recurring Cost   | -         | -             | -                       | -         | -                    | 3.628                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Subtotal: Hardware -<br>0305251F Cost                                  | -         | -             | -                       | -         | -                    | 3.628                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Gross/Weapon System<br>Cost  | -         | -             | -                       | -         | -                    | 3.628                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.00                    |



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

831970 / Modifications (COMSEC)

Equip / BSA 1: Comm Security Equipment(Comsec)

Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|   | Prior        |                  |                   | FY 2018           | FY 2018          | FY 2018        |                 |               |         |         | То       |       |
|---|--------------|------------------|-------------------|-------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|-------|
| Resource Summary                              | Years        | FY 2016          | FY 2017           | Base              | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total |
| Procurement Quantity (Units in Each)          | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 0.677            | 0.000             | 0.000             | 0.000            | 0.000          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 0.677 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Net Procurement (P-1) (\$ in Millions)        | -            | 0.677            | 0.000             | 0.000             | 0.000            | 0.000          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 0.677 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Total Obligation Authority (\$ in Millions)   | -            | 0.677            | 0.000             | 0.000             | 0.000            | 0.000          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 0.677 |
| (The following                                | Resource Sum | mary rows are fo | r informational p | ourposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |       |
| Initial Spares (\$ in Millions)               | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | - [      | -     |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                 | -                 | -                | =              | -               | -             | -       | -       | -        | -     |

# **Description:**

The Communications Security (COMSEC) modification activity ensures the integration, installation, and sustainment of cryptographic equipment. This activity is a critical component in providing robust, secure global communications, enabling information superiority. It provides the warfighter with the security needed to protect the flow and exchange of operational decision-making information through the retrofit and modification of selected COMSEC equipment. These modification efforts ensure legacy equipment can meet current COMSEC operational environment requirements. Funding for this effort is in program element (PE) 0303140F.

Modification 3080 funds were realigned to 3021 Space Procurement starting in FY17.

#### Justification:

FY17 and FY18 funding moved to appropriation 3021, Space Procurement. FY16 funding provided replacement of critical components to maintain mission data life cycle requirements. As the obsolescence of parts occurs in the sustainment of the products, modifications must be implemented to keep the products operational for satellite programs. Funds are used to update both cryptographic product end items and logistics lifecycle support elements.



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

832050 / International Intel Tech & Architectures

Equip / BSA 2: Intelligence Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0305600F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|   | Prior        | <b>5</b> )/ 00/10 | <b>5</b> )/ 004 <b>5</b> | FY 2018          | FY 2018          | FY 2018        | <b>5</b> 1/ 00 40 | <b>5</b> 1/ 0000 | <b>5</b> )/ 000/ | <b>5</b> 1/ 0000 | То       |        |
|---|--------------|-------------------|--------------------------|------------------|------------------|----------------|-------------------|------------------|------------------|------------------|----------|--------|
| Resource Summary                              | Years        | FY 2016           | FY 2017                  | Base             | oco              | Total          | FY 2019           | FY 2020          | FY 2021          | FY 2022          | Complete | Total  |
| Procurement Quantity (Units in Each)          | -            | -                 | -                        | -                | -                | -              | -                 | -                | -                | -                | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 0.000             | 0.000                    | 22.335           | 8.873            | 31.208         | 15.139            | 15.398           | 15.680           | 15.967           | -        | 93.392 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                 | -                        | -                | -                | -              | -                 | -                | -                | -                | -        | -      |
| Net Procurement (P-1) (\$ in Millions)        | -            | 0.000             | 0.000                    | 22.335           | 8.873            | 31.208         | 15.139            | 15.398           | 15.680           | 15.967           | -        | 93.392 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                 | -                        | -                | -                | -              | -                 | -                | -                | -                | -        | -      |
| Total Obligation Authority (\$ in Millions)   | -            | 0.000             | 0.000                    | 22.335           | 8.873            | 31.208         | 15.139            | 15.398           | 15.680           | 15.967           | -        | 93.392 |
| (The following                                | Resource Sum | mary rows are fo  | r informational p        | urposes only. Th | ne corresponding | budget request | s are documente   | ed elsewhere.)   |                  |                  | <u>'</u> |        |
| Initial Spares (\$ in Millions)               | -            | -                 | -                        | -                | -                | -              | -                 | -                | -                | -                | -        | -      |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                 | -                        | -                | -                | -              | -                 | -                | -                | -                | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                 | -                        | -                | -                | -              | -                 | -                | -                | -                | -        | _      |

# **Description:**

International Intelligence Technology and Architectures oversees, manages, and provides the United States (US) component of the multi-national Battlefield Information Collection and Exploitation System (US BICES) with a collaborative environment and intelligence sharing enterprise required for processing and disseminating critical intelligence information between and among US, North Atlantic Treaty Organization (NATO), allied and coalition forces. The US BICES program procures and maintains a standing intelligence information sharing capability across Department of Defense (DoD), Combat Support Agencies, and multiple Combatant Commands (CCMD) for the Under Secretary of Defense, Intelligence (USD (I)). At the request of USD (I), US BICES is extended beyond U.S. European Command (USEUCOM) into all CCMDs and is known as US BICES Extended (US BICES-X). US BICES provides an "enduring" US and Coalition interoperable intelligence sharing multi-level secure technical architecture utilizing releasable elements of the Defense Intelligence Information Enterprise (DI2E) framework and functions to support the full spectrum of intelligence operations and dissemination throughout the DoD community. Also, it enables instantiation of US BICES/BICES-X as the intelligence contribution to the Mission Partner Environment (MPE).

This is not a new start. The funding was previously justified in another P-1 Line.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

832050 / International Intel Tech & Architectures

Equip / BSA 2: Intelligence Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0305600F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule                        |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                                   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | International Intel Tech & Architectures | P-5a        | В        |                       | - / -                                    | - / 0.000                                | - / 0.000                                | - / 22.335                               | - / 8.873                                | - / 31.208                               |
| P-40            | Total Gross/Weapon System Cost           |             |          |                       | - 1 -                                    | - / 0.000                                | - / 0.000                                | - / 22.335                               | - / 8.873                                | - / 31.208                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

In response to CCMD requests, provides funding for extended use of US BICES-capabilities in support of USD (I) global intelligence sharing requirements. Provides Computer Equipment Replacement Program (CERP) for the US BICES-X Enterprise. Procures hardware and software to support the continued build out and expansion of the US BICES-X/SOF BICES coalition information sharing capabilities to US Combatant Commanders and SOF units in support of on-going operations utilizing US BICES-X capabilities world-wide. Supports J2 (Joint Intelligence) network requirements to exchange intelligence information with bi-lateral, multi-lateral, and NATO partners. Will deliver procedures, workstations, switches, servers, cross-domain solutions, satellite bandwidth, microwave communications, video teleconference suites, network equipment, storage and backup, encryption equipment, software licenses, infrastructure, deployable suites, Trusted Network Environment (TNE) equipment and software communications. Variations in quantity and unit price reflect planned periodic refresh of equipment and software over the lifecycle of the system.

#### Other Procurement funding will:

- Provide and support extension of the US BICES multilateral, and BICES-like bilateral intelligence information sharing capabilities within each of the Unified Commands via expanded terrestrial and satellite communications, information technology systems, integrated wide area and meshed networking, deployable containers/elements, and advanced Joint Intelligence Operations Center (JIOC)-IT/Distributed Common Ground/Surface Systems (DCGS) releasable analytical applications.
- Procure the hardware and software needed to establish US BICES-X capabilities as a core infrastructure and enterprise for the intelligence component of the DoD Mission Partner Environment (MPE).
- Continue support to the (US as framework nation) US/Coalition Special Operations Forces (SOF) supporting NATO and worldwide intelligence needs for the Global Pursuit mission and the Intelligence Fusion Center at the Joint Analysis Center, United Kingdom (UK), in support of NATO.
- Procure work stations, enterprise hardware and software, security accreditation, and network connections supporting strategic, operational and forward deployed warfighting forces in multiple theaters.
- Provide for the Computer Equipment Replacement Program (CERP) upgrades to the US BICES-X Enterprise. These upgrades will provide cross domain solutions to support the reduction of barriers to information sharing with coalition partners identified in the Information Sharing Integrated Product Team Foreign Disclosure Report dated March 2010. The upgrades also consolidate and federate coalition support architectures across CCMDs to take advantage of US BICES-X based technologies to increase efficiencies.
- Provide initial capabilities for the establishment of a coalition baseline for the Special Operations Command Intelligence sharing capabilities.

Variations in quantity and unit price reflect planned refresh of equipment and software over the lifecycle of the system.

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Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 2

Date: May 2017

Item Number / Title [DODIC]:
- / International Intel Tech & Architectures

| ID Code (A=Service Ready, B=Not Service Ready) : B       |                             | N                       | IDAP/MAIS Code:            |              |             |               |
|--|-----------------------------|-------------------------|----------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                 | FY 2017                    | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | -                       | -                          | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 0.00                    | 0.000                      | 22.335       | 8.873       | 31.208        |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                       | -                          | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 0.00                    | 0.000                      | 22.335       | 8.873       | 31.208        |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                       | -                          | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)              | -                           | 0.00                    | 0.000                      | 22.335       | 8.873       | 31.208        |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reque | sts are documented elsewhe | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                       | -                          | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Dollars)            | -                           | -                       | -                          | -            | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | F         | Prior Years          | 5                       |           | FY 2016              |                         |                                       | FY 2017              |                         | F۱         | ′ 2018 Bas           | se                      | FY         | / 2018 OC     | 0                       | F۱         | <b> 2018 Tot</b>     | al                      |
|---|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|---------------------------------------|----------------------|-------------------------|------------|----------------------|-------------------------|------------|---------------|-------------------------|------------|----------------------|-------------------------|
| Cost Elements   | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost                             | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - International Intel                                  | Tech Cost |                      |                         |           |                      |                         | · · · · · · · · · · · · · · · · · · · |                      |                         | '          |                      |                         | <u> </u>   | '             |                         |            |                      |                         |
| Recurring Cost  |           |                      |                         |           |                      |                         |                                       |                      |                         |            |                      |                         |            |               |                         |            |                      |                         |
| Workstation Suites  | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 2,000.00   | 406                  | 0.812                   | 2,000.00   | 60            | 0.120                   | 2,000.00   | 466                  | 0.93                    |
| Server Suites   | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 15,000.00  | 85                   | 1.275                   | 15,000.00  | 20            | 0.300                   | 15,000.00  | 105                  | 1.57                    |
| Laptop Suites   | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 2,000.00   | 23                   | 0.046                   | -          | -             | -                       | 2,000.00   | 23                   | 0.04                    |
| Printers  | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | -          | -                    | 0.030                   | -          | -             | 0.011                   | -          | -                    | 0.04                    |
| Storage and Backup<br>Suites                                    | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 24,000.00  | 22                   | 0.528                   | 24,000.00  | 1             | 0.024                   | 24,000.00  | 23                   | 0.55                    |
| Network Equipment   | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 561,000.00 | 6                    | 3.366                   | 561,000.00 | 7             | 3.927                   | 561,000.00 | 13                   | 7.29                    |
| Video Teleconference<br>Suite                                   | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 83,000.00  | 3                    | 0.249                   | 83,000.00  | 22            | 1.826                   | 83,000.00  | 25                   | 2.07                    |
| Encryption Equipment  | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 15,000.00  | 38                   | 0.570                   | 15,000.00  | 71            | 1.065                   | 15,000.00  | 109                  | 1.63                    |
| Infrastructure  | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | 56,000.00  | 25                   | 1.400                   | 56,000.00  | 22            | 1.232                   | 56,000.00  | 47                   | 2.63                    |
| Deployable System<br>Monitors 32 inch LCD<br>(373 Base, 80 OCO) | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | -          | -                    | 0.091                   | -          | -             | 0.020                   | -          | -                    | 0.11                    |
| Subtotal: Recurring Cost  | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | -          | -                    | 8.367                   | -          | -             | 8.525                   | -          | -                    | 16.89                   |
| Non Recurring Cost  |           |                      |                         |           |                      |                         |                                       |                      |                         |            |                      |                         |            |               |                         |            |                      |                         |
| Fly-Away Deployable<br>BICES Mobile Units<br>with Video         | -         | -                    | -                       | -         |                      | 0.000                   | -                                     |                      | 0.000                   | -          |                      | -                       | 42,000.00  | 5             | 0.210                   | 42,000.00  | 5                    | 0.21                    |
| Subtotal: Non Recurring<br>Cost                                 | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | -          | -                    | -                       | -          | -             | 0.210                   | -          | -                    | 0.21                    |
| Subtotal: Hardware -<br>International Intel Tech Cost           | -         | -                    | -                       | -         | -                    | 0.000                   | -                                     | -                    | 0.000                   | -          | -                    | 8.367                   | -          | -             | 8.735                   | -          | -                    | 17.10                   |

LI 832050 - International Intel Tech & Architectures Air Force

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P-1 Line #13

**Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: - / International Intel Tech & Architectures

3080F / 03 / 2 832050 / International Intel Tech & Architectures

MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): B

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   |           |               |                         |           | •             |                         |           |               |                         |            |                      |                         |           |                      |                         |            |                      |                         |
|---|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|----------------------|-------------------------|-----------|----------------------|-------------------------|------------|----------------------|-------------------------|
|   | F         | Prior Years   | S                       |           | FY 2016       |                         |           | FY 2017       |                         | F۱         | / 2018 Bas           | se                      | F         | / 2018 OC            | 0                       | F۱         | / 2018 Tot           | al                      |
| Cost Elements   | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Software - International Intel                        | Tech Cost |               |                         |           |               |                         |           |               |                         |            |                      |                         |           |                      |                         |            |                      |                         |
| Recurring Cost  |           |               |                         |           |               |                         |           |               |                         |            |                      |                         |           |                      |                         |            |                      |                         |
| Software Licenses <sup>(†)</sup>                      | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | 776,000.00 | 18                   | 13.968                  | -         | -                    | -                       | 776,000.00 | 18                   | 13.968                  |
| Subtotal: Recurring Cost                              | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -          | -                    | 13.968                  | -         | -                    | -                       | -          | -                    | 13.968                  |
| Subtotal: Software -<br>International Intel Tech Cost | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -          | -                    | 13.968                  | -         | -                    | -                       | -          | -                    | 13.968                  |
| Support - International Intel To                      | ech Cost  |               |                         |           |               |                         |           |               |                         |            |                      |                         |           |                      |                         |            |                      |                         |
| US BICES Mobility                                     | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -          | -                    | -                       | -         | -                    | 0.044                   | -          | -                    | 0.044                   |
| Program Support                                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -          | -                    | -                       | -         | -                    | 0.094                   | -          | -                    | 0.094                   |
| Subtotal: Support -<br>International Intel Tech Cost  | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -          | -                    | -                       | -         | -                    | 0.138                   | -          | -                    | 0.138                   |
| Gross/Weapon System<br>Cost                           | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -          | -                    | 22.335                  | -         | -                    | 8.873                   | -          | -                    | 31.208                  |

#### Remarks:

Automated P-Doc system rounds unit cost and does not allow unit costs below \$1,000.

(†) indicates the presence of a P-5a

| hibit P-5a, Procurem                 | ent Hi      | story a   | nd Planning: FY 2018 A  | ir Force                               |  |               |                              | Date          | : May 201              | 7                      |                               |                   |
|--------------------------------------|-------------|-----------|-------------------------|--|--|---------------|------------------------------|---------------|------------------------|------------------------|-------------------------------|-------------------|
| propriation / Budget<br>80F / 03 / 2 | Activ       | ity / Bud | dget Sub Activity:      | P-1 Line Item Nu<br>832050 / Internati | mber / Title:<br>onal Intel Tech & Ard | chitectures   |                              | l l           | Number /<br>ernational |                        |                               | chitectures       |
| Cost Elements                        | 0<br>C<br>0 | FY        | Contractor and Location | Method/Type<br>or<br>Funding Vehicle   | Location of PCO                        | Award<br>Date | Date<br>of First<br>Delivery | Qty<br>(Each) | Unit Cost              | Specs<br>Avail<br>Now? | Date<br>Revision<br>Available | RFP Issue<br>Date |
| Software Licenses                    |             | 2018      | GDIT / Springfield/VA   | SS / IDIQ                              | AA-CDM                                 | Jan 2018      | Apr 2018                     | 18            | 776,000.00             | Υ                      |                               |                   |
|                                      | 0           |           |                         |  |  | 1             |                              |               |                        | _                      | Av                            | railable          |



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

832060 / Intelligence Training Equipment

Equip / BSA 2: Intelligence Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020       | FY 2021 | FY 2022 | To<br>Complete | Total  |
|--|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|---------------|---------|---------|----------------|--------|
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 4.041            | 6.982             | 5.892            | 0.000            | 5.892            | 5.529           | 5.627         | 5.730   | 5.831   | -              | 39.632 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -      |
| Net Procurement (P-1) (\$ in Millions)         | -              | 4.041            | 6.982             | 5.892            | 0.000            | 5.892            | 5.529           | 5.627         | 5.730   | 5.831   | -              | 39.632 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -      |
| Total Obligation Authority (\$ in Millions)    | -              | 4.041            | 6.982             | 5.892            | 0.000            | 5.892            | 5.529           | 5.627         | 5.730   | 5.831   | -              | 39.632 |
| (The following                                 | Resource Sum   | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request   | s are documente | d elsewhere.) |         | *       |                |        |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | _                 | -                | -                | -                | -               | _             | -       | -       | -              | -      |

## **Description:**

The Intelligence Training Equipment P-1 line procures equipment for use in initial and advanced training in the General Intelligence and Cryptologic and Signals Intelligence related career fields. The equipment supports training for intelligence officers, geospatial analysts, targeteers, operations analysts, linguists, network analysts, and all communications (except communications security) and electronic intelligence analysts. The systems support intelligence, surveillance, and reconnaissance applications. The major focus of the systems is to provide the sole source for functional training on the newest generation of intelligence systems with an emphasis on computer-based training systems through modeling and simulation. This equipment is critical in preparing military intelligence personnel to support warfighting commanders and the National Intelligence Program (NIP). The equipment supports enterprise-wide intelligence training for Air Force (AF), Department of Defense (DoD), Department of Homeland Security (DHS), and Joint/Coalition Partner personnel at Goodfellow Air Force Base (GAFB), Texas.

PE 0804733F GENERAL INTELLIGENCE SKILL TRAINING (GIST)

GOODFELLOW INTELLIGENCE TRAINING ARCHITECTURE (GITA) UPGRADE: Continues to incorporate new equipment to support the development of the enterprise architecture, consolidating multiple networks and systems into a single integrated GITA.

The FY18 funding request includes an increase to account for additional Air Force requirements.

Funding for this exhibit contained in PE 0804733F.

#### Justification:

PE 0804733F GENERAL INTELLIGENCE SKILL TRAINING

GOODFELLOW INTELLIGENCE TRAINING ARCHITECTURE (GITA) FY18 funding will used be on the GITA infrastructure to modernize/upgrade the training network backbone and delivery systems supporting over 7600 students annually. Upgrades ensure that GITA meets/exceeds the latest in cyber security requirements at each security level. GITA provides lifecycle support of the hardware and software required to deliver training designed to meet operational customer requirements. GITA encompasses the following: student workstations; network; servers; storage solutions; thin client technology; scenario-based modeling and simulation models; courseware development software; delivery servers; application hardware; and networking equipment. GITA aligns technologies with advanced teaching techniques; increases system capabilities to support ever-evolving operational intelligence tools; and addresses uncertainty in continued sustainment capabilities to reduce failure rates and outages.

LI 832060 - Intelligence Training Equipment Air Force

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P-1 Line #14

| Exhibit P-40, Budget Line Item Justification:  | : FY 2018 Air Force                               |  |   | Date: May 2017       |
|--|---|--|---|----------------------|
| Appropriation / Budget Activity / Budget Sul 3080F: Other Procurement, Air Force / BA 03: I Equip / BSA 2: Intelligence Programs | b Activity:<br>Electronics and Telecommunications | P-1 Line Item No<br>832060 / Intellige | umber / Title:<br>ence Training Equipment |                      |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It                    | ems: N/A                               | Other Related P                           | rogram Elements: N/A |
| Line Item MDAP/MAIS Code: N/A  |   |  |   |                      |
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LI 832060 - Intelligence Training Equipment Air Force

P-1 Line #14

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

1203179F

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

832070 / Intelligence Comm Equipment

Equip / BSA 2: Intelligence Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0305192F. 0305221F.

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|  | Prior           |                  |                    | FY 2018          | FY 2018         | FY 2018        |                       |                       |                       |                       | То       |                        |
|--|-----------------|------------------|--------------------|------------------|-----------------|----------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|------------------------|
| Resource Summary                               | Years           | FY 2016          | FY 2017            | Base             | oco             | Total          | FY 2019               | FY 2020               | FY 2021               | FY 2022               | Complete | Total                  |
| Procurement Quantity (Units in Each)           | -               | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Cost (\$ in Millions)      | 28.093          | 29.272           | 30.504             | 34.072           | 2.000           | 36.072         | 31.841 <sup>(a)</sup> | 29.777 <sup>(b)</sup> | 30.819 <sup>(c)</sup> | 30.846 <sup>(d)</sup> | -        | 247.224 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -               | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Net Procurement (P-1) (\$ in Millions)         | 28.093          | 29.272           | 30.504             | 34.072           | 2.000           | 36.072         | 31.841                | 29.777                | 30.819                | 30.846                | -        | 247.224                |
| Plus CY Advance Procurement (\$ in Millions)   | -               | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Total Obligation Authority (\$ in Millions)    | 28.093          | 29.272           | 30.504             | 34.072           | 2.000           | 36.072         | 31.841                | 29.777                | 30.819                | 30.846                | -        | 247.224                |
| (The following                                 | g Resource Sumi | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget request | s are documente       | d elsewhere.)         |                       |                       |          |                        |
| Initial Spares (\$ in Millions)                | -               | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Flyaway Unit Cost (\$ in Millions)             | -               | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -               | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |

# **Description:**

PE 0207431F Combat Air Intelligence System Activities - P-40A

Enhanced GEOSPATIAL PRODUCT LIBRARY (eGPL): eGPL provides all AF units access to digital GEOINT and targeting data products in support of targeting, intelligence and mission planning processes, including support to units deploying to South West Asia and North Africa. It provides the sole resource to store and immediately retrieve large digital files and mission essential GEOINT data required to conduct AF mission sets. This storage includes tape drives to ensure data survivability and rapid back-up/restoration 20 times faster than network technology, freeing units critical time to support mission tasks.

UNIT LEVEL INTELLIGENCE (ULI) SYSTEMS: ULI fields the Personal Computer- Integrated Imagery and Intelligence (PC-I3/T) and Targeting Application Workstation (TAW) systems which are used by intelligence analysts to produce Targeting and Mission Planning materials.

INFORMATION STORAGE (iSToRE): iSToRE replaces NGA's legacy Image Product Library (IPL), which NGA ceases funding upon iSToRE release. It provides state-of-the-art technology to rapidly access, store and disseminate intelligence to/from United States Imagery and Geospatial System (USIGS) library system, giving imagery analysts, cartographers, intelligence and operations personnel direct access to imagery products and associated data to support their respective mission needs.

GLOBAL COMMAND AND CONTROL SYSTEM -INTEGRATED IMAGERY AND INTELLIGENCE (GCCS-I3): GCCS-I3): GCCS-I3 provides the central targeting data infrastructure for the AFTC's distributed operations in support of worldwide targeting requirements from air component commanders and their subordinate units. It fields the capability to store/expose virtual electronic target folders through Joint Targeting Toolbox (JTT), order of battle data through Analyst Workshop (AWS) and access to tailored data sets to users via widget technology supported through the Ozone Widget Framework (OWF). It provides the Joint Force Air Component Commander (JFACC) and his Air Operations Center (AOC) staff machine to machine access to targeting and intelligence data support the planning, tasking, execution and assessment of air operations. It provides unit operation access to authoritative data in support of mission planning and tactical operations, to include locally collected tactical imagery, live video streams, and other intelligence with national and theater-produced intelligence.

JOINT TARGETING TOOLBOX (JTT): Provides JTT servers for interfacing programs to test against. Servers are needed on Unclassified and Secret environments and will require software licenses to support operations.

UNCLASSIFIED

P-1 Line #15

| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force   |   | Date: May 2017 |
|---|---|----------------|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 2: Intelligence Programs | P-1 Line Item Number / Title:<br>832070 / Intelligence Comm Equipment |                |

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: 0305192F, 0305221F, 1203179F

#### Line Item MDAP/MAIS Code: N/A

INFORMATION FOR OPERATIONAL AND TACTICAL ANALYSIS (IOTA): Provides web-based information management in the form of automated ingest and analysis of combat intelligence, surveillance, and reconnaissance (ISR) reports. The two ISR-related components of IOTA are the mission report (MISREP) analysis tool (MAT) and ISR Assessment Tool (IAT).

INTELLIGENCE AUTOMATED DATA PROCESSING EQUIPMENT (IADPE): Provides capital equipment replacement program funds for USAFE data processing systems and communications network. Provides unit operation access to authoritative data in support of mission planning and tactical operations, to include locally collected tactical imagery, live video streams, and other intelligence with national and theater-produced intelligence.

Targeting and Geospatial-Intelligence (T&G) Program Management Office (PMO) CENTER OF EXCELLENCE (COE): Provides the infrastructure that enables the agile development, sustainment, and fielding of new T&G capabilities, and ensures that the technical baseline is established and controlled by the Government. Sustainment includes help desk support, documentation, information assurance, STIGs/TCNOs, software patches and fixes. Fielding supports ULI, GPL, IOTA, and any new T&G capability not fielded via other paths.

#### PE 0305146F Defense Joint Counterintelligence Activities - P-40A

Supports both Technical Surveillance and Technical Surveillance Countermeasures (TSCM) to counterintelligence operations conducted by the Air Force Office of Special Investigations for AF and DoD entities to detect and deter covert activities conducted by Foreign Intelligence Services seeking to compromise classified or sensitive information. The technical equipment required for these investigations is unique and complex and is a part of the formally designated USAF TSCM weapons system.

#### PE 0305179F Integrated Broadcast Service (IBS) has changed to a new PE 1203179F in FY18 - P-40A

INTEGRATED BROADCAST SERVICE (IBS): The IBS is a multi-sensor, multisource system of systems for the dissemination of integrated threat warning and blue force tracking information. IBS provides intelligence producers and information sources the means to analyze and disseminate strategic, operational, and tactical intelligence and warning information directly to the warfighter. The IBS operational baseline represents the migration, integration, and consolidation of existing tactical data dissemination into a future common architecture message format.

#### PE 0307577F Intelligence Mission Data (IMD) - P-40A

Funding will enable procurement of equipment for Advanced NCTR Collect and storage systems supporting Operational Reconnaissance data automation.

#### PE 1203400F Space Superiority Intelligence (SSI) - P-40A

This is a new P.E. and a new start in FY18. This PE executes requirements for SSI. Funds may be used for other AFNet requirements if required. Funds are required to re-capitalize current fielded systems that have operated for 4 years. Processing equipment runs 24/7 to support high utilization rates. Antennas and supporting equipment are fully exposed to the elements, experience a great deal of physical movement, and are reaching end of life expectancy.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

832070 / Intelligence Comm Equipment

Equip / BSA 2: Intelligence Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0305192F, 0305221F,

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule                              |             |            |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--|-------------|------------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*   | Subexhibits | ID<br>CD   | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) I (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Combat Air Intelligence System Activities      |             |            |                       | - / -                                    | - /3.894                                 | - / 6.242                                | - / 6.549                                | - / 0.000                                | - / 6.549                                |
| P-40a           | Defense Joint Counterintelligence Activities   |             |            |                       | - / -                                    | - / 0.460                                | - / 0.711                                | - / 1.181                                | - / 0.000                                | - / 1.181                                |
| P-40a           | Integrated Broadcast Service (IBS)             |             |            |                       | - / -                                    | - / 1.905                                | - /4.003                                 | - /4.000                                 | - / -                                    | - /4.000                                 |
| P-40a           | Integrated Broadcast Service (IBS)             |             |            |                       | - /21.203                                | - / 13.106                               | - / 12.449                               | - / 13.283                               | - / 0.000                                | - / 13.283                               |
| P-40a           | Military Intelligence Program (MIP) Activities |             |            |                       | - /3.920                                 | - /2.900                                 | - /4.516                                 | - / 4.434                                | - / 0.000                                | - /4.434                                 |
| P-40a           | Network-Centric Collaborative Targeting        |             |            |                       | - /2.970                                 | - / 3.517                                | - / 2.583                                | - / 3.312                                | - / 0.000                                | - / 3.312                                |
| P-40a           | Intelligence Mission Data (IMD)                |             |            |                       | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 1.313                                | - / 0.000                                | - / 1.313                                |
| P-40a           | Space Superiority Intelligence                 |             |            |                       | - / -                                    | - / 3.490                                | - / 0.000                                | - / 0.000                                | - / -                                    | - / 0.000                                |
| P-40a           | Space Superiority Intelligence                 |             |            |                       | - / -                                    | - / -                                    | - / -                                    | - / -                                    | - / 2.000                                | - /2.000                                 |
| P-40            | Total Gross/Weapon System Cost                 |             | - / 28.093 | - / 29.272            | - / 30.504                               | - / 34.072                               | - / 2.000                                | - / 36.072                               |  |  |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

This program, Intelligence Comm Equipment P-40A Item Intelligence Mission Data (IMD) Advanced NCTR Collect, is a new start.

1203179F

This program, Intelligence Comm Equipment P-40A Item New Item, is a new start.

In PE 0307577F, In PE 0307577F, PE 0207431F Combat Air Intelligence System Activities - P-40A

ENHANCED GEOSPATIAL PRODUCT LIBRARY (EGPL): Funding provides for the capital equipment replacement of EGPL servers, drives, and associated equipment to ensure current, dependable data repository for intelligence threat assessment and combat mission planning support at over 260 units worldwide.

UNIT LEVEL INTELLIGENCE (ULI) SYSTEMS: Funding provides for the capital equipment replacement of ULI systems providing crucial capabilities to the Warfighter to include Intelligence Preparation of the Operational Environment (IPOE), data gathering and compilation, support to mission execution, intelligence reporting, targeting, weapon systems video processing, and post-mission assessment support at over 327 units worldwide

INFORMATION STORAGE (iSToRE): Funding provides for the capital equipment replacement of iSToRE systems to provide imagery analysts, cartographers, intelligence and operations personnel direct access to imagery products and associated data to support their respective mission needs at wing and below units, to include the Air Force Targeting Center.

GLOBAL COMMAND AND CONTROL SYSTEM -INTEGRATED IMAGERY AND INTELLIGENCE (GCCS-I3): Funding provides for the capital equipment replacement of GCCS-I3 servers and associated equipment to provide a centralized targeting data infrastructure throughout the Air Force Targeting Enterprise (AFTE).

JOINT TARGETING TOOLBOX (JTT): Funding will be used to provide an environment for interfacing programs to test against JTT. The JTT program interfaces with many other programs (AFATDS/JEMS/TOMAWK) that require an environment that they can test against. The NG effort had previously provided both unclassified/classified servers that interfacing programs could test against, but they no longer exist with the contract transfer to BAE. If the servers are not procured the fielding path for JTT releases has an increased risk to slip due to interface issues.

LI 832070 - Intelligence Comm Equipment Air Force

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P-1 Line #15

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 2: Intelligence Programs

P-1 Line Item Number / Title:
832070 / Intelligence Comm Equipment

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: 0305192F, 0305221F, 1203179F

Line Item MDAP/MAIS Code: N/A

INFORMATION FOR OPERATIONAL AND TACTICAL ANALYSIS (IOTA): Funding provided installation costs in support of fielding into the Air Operations Centers (AOC).

INTELLIGENCE AUTOMATED DATA PROCESSING EQUIPMENT (IADPE): Funding will be used to procure servers, storage devices, associated hardware upgrades and installation costs.

Targeting and Geospatial Intelligence (T&G) PMO CENTER OF EXCELLENCE (COE): The Center of Excellence is critical to the Unit Level Intelligence mission as the center performs all system integration work, conducts functional testing, runs cyber security scans, pushes necessary information assurance patches to the user community, provides help desk support, and fields the hardware and software components needed to successfully employ the Targeting Applications Workstation and the Personal Computer - Integrated Imagery and Intelligence/Targeting systems.

PE 0305146F Defense Joint Counterintelligence Activities - P-40A

FY18 funding procures the periodic refresh of equipment to provide state of the art capabilities to detect and neutralize criminal activities targeted against sensitive and classified AF and DoD information and activities.

PE 0305179F Integrated Broadcast Service (IBS) - P-40A

FY18 funding for IBS procurement efforts are focused in the following areas:

- (1). CIB UPLINK SITE (CUS) TACTICAL INFORMATION PROCESSOR AND ONLINE FUSION FACILITY (TIPOFF): TIPOFF serves as the control system for the CIB Uplink Site and interface to the IBS Network Services (IBS-NS). Each major release of the software incorporates approved requirements as necessitated by mission changes, system interoperability, and system security. The new release supports migration to Common Interactive Broadcast Uplink Sites.
- (2) COMMON INTERACTIVE BROADCAST PLANNING TOOL (CIB-PT): The CIB-PT provides the COCOM Planners an integrated software/hardware mechanism to allocate space-based communications resources to theater and national producers, specifically to reliably optimize the timeliness of scarce bandwidth allocation of extremely time-critical messages. Each major release of the software/hardware incorporates updated producer prioritization, bandwidth allocation, mission monitoring and interfaces to the STRATCOM systems as necessitated by mission changes, system interoperability, and system security compliance to achieve threshold requirements.
- (3) COMMON MESAGE FORMAT PARSER LIBRARY (CMFPL): The CMF repository is required for the automatic exchange of data among processing, exploitation, and dissemination (PED) systems. This effort procures the infrastructure for dynamic software library updates for multiple operating systems essential to broadcast operation.
- (4) IBS V&V Environment: Procures simulation and stimulation tools to certify and verify mission equipment for operational use. Included is the MULTI-AREA REMOTE SIMULATOR (MARS) a component of the IBS verification and validation process used to emulate multiple systems messaging under operational conditions and the UNIVERSAL CIB TEST SET (UCTS) a component that emulates the UHF SATCOM environment.
- (5) TERMINAL, DATALINK & ENTERPRISE MITIGATION: Funds direct mission support activities such as verification & validation documentation; uplink and receive and transmit terminal upgrade, enhancements and spares; mitigation; CMF product support; Joint Tactical Data Link (JTDL/IBS) support; net-centric support; product documentation; studies and analyses; IBS Web Support and contractor systems engineering activities.
- (6) IBS-NS: Scaling capability is required for messaging under operational use. Funds approved modernization of Global IBS Servers (GINS), and Theater Interface Nodes (TINS), technology refreshment and integration as necessitated by mission changes, system interoperability, and system security.

PE 0305912F Military Intelligence (MIP) Activities - P-40A

FY18 funding will enable completion of AF JWICS enterprise disaster recovery capabilities for core services at the four Enterprise Service Centers. Funds will be used to conduct site surveys, procure servers, storage devices, associated software / hardware upgrades, and installation costs.

LI 832070 - Intelligence Comm Equipment Air Force

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P-1 Line #15

| Exhibit P-40, Budget Line Item Justification: FY 2018  | 3 Air Force                    |                                      |                 | Date: May 2017       |  |  |  |  |
|--|--------------------------------|--------------------------------------|-----------------|----------------------|--|--|--|--|
| Appropriation / Budget Activity / Budget Sub Activit   | y:                             | P-1 Line Item Number / Title:        |                 |                      |  |  |  |  |
| 3080F: Other Procurement, Air Force / BA 03: Electroni | cs and Telecommunications      | 832070 / Intelligence Comm Equipment |                 |                      |  |  |  |  |
| Equip / BSA 2: Intelligence Programs                   |                                |                                      |                 |                      |  |  |  |  |
| ID Code (A=Service Ready, B=Not Service Ready): A      | Program Elements for Code B It | ems: 0305192F, 0305221F,             | Other Related P | rogram Elements: N/A |  |  |  |  |

Program Elements for Code B Items: 0305192F, 0305221F, 1203179F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

PE 0305221F Network Centric Collaborative Targeting - P-40A

FY18 funding is for NCCT hardware refreshes at ground stations in support of a new software baseline roll out and user requested upgrades. NCCT core technology investments include, but are not limited to, operational interfaces, network controllers, fusion engines, and data guards for multi-level security hardware and software items based on operator specified rule-sets. NCCT core technology also supports Air Force and Joint experiments, demonstrations and exercises as necessary.

PE 0307577F Intelligence Mission Data (IMD) - P-40A - is a new start in FY18.

IMD Advanced NCTR Collect: (\$813K) Funding will deliver 2 items.

Operational Reconnaissance Data Automation: (\$500K) Funding will deliver 2x Servers, 1x Storage Area Network, 2x Fiber Channel switches, 1 x KVM, 2x Rack, 2x Management switches, server management and database software.

PE 1203400F - Space Superiority Intelligence (SSI) - P-40A

In FY18, this is a new P.E. and a new start. FY18 funding requests \$2M in Overseas Contingency Operations (OCO) funding to support the warfighter. This PE executes requirements for SSI. Funds may be used for other AFNet requirements if required.

ARC STORM: Uses commercially available technology and systems to provide the rapid geo-location of commercial satellite communication emitter locations, utilizing unmanned, remotely operated systems located in key area throughout the world.

Funds are required to re-capitalize current fielded systems that have operated for 4 years. Processing equipment runs 24/7 to support high utilization rates. Antennas and supporting equipment are fully exposed to the elements, experience a great deal of physical movement, and are reaching end of life expectancy.

ARC STORM systems will become inoperable without equipment recapitalization; resulting in loss of geo-location collection. Funds will allow immediate re-capitalization of two fielded systems plus an additional spare, allowing for continued support to operations.

Efforts with funding starting in FY 2019 through FY 2022 are summarized on the P-40. Not all details of this funding are included in this P-40 exhibit set. A summary of the excepted details is as follows:

- (a) FY 2019 Cost Delta: 31.841 million
- (b) FY 2020 Cost Delta: 29.777 million
- (c) FY 2021 Cost Delta: 30.819 million
- (d) FY 2022 Cost Delta: 30.846 million
- (e) FY Total Cost Delta: 247.224 million

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 2

P-1 Line Item Number / Title:

832070 / Intelligence Comm Equipment

Date: May 2017

Aggregated Items Title:

Combat Air Intelligence System Activities

|                                |          |                       |           |               |               |           |               |               |           |                      |                         | •         |                      |                         |           |               |               | <u>,                                     </u> |               |                         |
|--------------------------------|----------|-----------------------|-----------|---------------|---------------|-----------|---------------|---------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|---------------|---|---------------|-------------------------|
|                                |          |                       | F         | Prior Year    | s             |           | FY 2016       |               | 6 FY 2017 |                      |                         | FY        | ′ 2018 Ba            | se                      | F         | / 2018 OC     | 0             | F   | / 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost | Unit Cost | Qty<br>(Each) | Total<br>Cost | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost | Unit Cost                                     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                  |          |                       | (4)       | (2001)        | (\$)          | (0)       | (2001)        | (\$)          | (\$)      | (2001.)              | (\$)                    | (0)       | (2001)               | (\$)                    | (\$ 11.7  | (2007.)       | (\$)          | (4)   | (200.1)       | (0)                     |
| CAIS PE 0207431F               | Α        |                       | -         | -             | -             | -         | -             | 0.000         | -         | -                    | 1.158                   | -         | -                    | 0.517                   | -         | -             | -             | -   | -             | 0.517                   |
| ULI                            | Α        |                       | -         | -             | -             | -         | -             | 1.368         | -         | -                    | 0.408                   | -         | -                    | 2.527                   | -         | -             | -             | -   | -             | 2.527                   |
| GPL                            | Α        |                       | -         | -             | -             | -         | -             | 1.080         | -         | -                    | 1.845                   | -         | -                    | 2.337                   | -         | -             | -             | -   | -             | 2.337                   |
| IStore                         | Α        |                       | -         | -             | -             | -         | -             | 0.520         | -         | -                    | 0.000                   | -         | -                    | -                       | -         | -             | 0.000         | -   | -             | 0.000                   |
| GCCS-I3                        | Α        |                       | -         | -             | -             | -         | -             | 0.312         | -         | -                    | 0.000                   | -         | -                    | 0.345                   | -         | -             | -             | -   | -             | 0.345                   |
| IOTA                           | Α        |                       | -         | -             | -             | -         | -             | 0.314         | -         | -                    | 0.000                   | -         | -                    | -                       | -         | -             | -             | -   | -             | -                       |
| COE T&G Integrator             | Α        |                       | -         | -             | -             | -         | -             | 0.300         | -         | -                    | 0.000                   | -         | -                    | -                       | -         | -             | -             | -   | -             | -                       |
| JTT                            | Α        |                       | -         | -             | -             | -         | -             | 0.000         | -         | -                    | 2.831                   | -         | -                    | 0.823                   | -         | -             | -             | -   | -             | 0.823                   |
| Subtotal: Uncategorized        |          |                       | -         | -             | -             | -         | -             | 3.894         | -         | -                    | 6.242                   | -         | -                    | 6.549                   | -         | -             | 0.000         | -   | -             | 6.549                   |
| Total                          |          |                       | -         | -             | -             | -         | -             | 3.894         | -         |                      | 6.242                   | -         | -                    | 6.549                   | -         | •             | 0.000         | -   | -             | 6.549                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 03 / 2

832070 / Intelligence Comm Equipment

**Aggregated Items Title:**Defense Joint Counterintelligence

Activities

|   |          |               |           |           |               |           |         |               |           |         |               |           |           |               | A         | cuvilles |               |           |          |               |
|---|----------|---------------|-----------|-----------|---------------|-----------|---------|---------------|-----------|---------|---------------|-----------|-----------|---------------|-----------|----------|---------------|-----------|----------|---------------|
|   |          |               | Р         | rior Year | s             |           | FY 2016 |               |           | FY 2017 |               | FY        | ′ 2018 Ba | se            | FY        | 2018 OC  | 0             | F۱        | 2018 Tot | al            |
| Item Number /   | ID       | MDAP/<br>MAIS | Unit Cost | Qty       | Total<br>Cost | Unit Cost | Qty     | Total<br>Cost | Unit Cost | Qty     | Total<br>Cost | Unit Cost | Qty       | Total<br>Cost | Unit Cost | Qty      | Total<br>Cost | Unit Cost | Qty      | Total<br>Cost |
| Title [DODIC]   | CD       | Code          | (\$ M)    | (Each)    | (\$ M)        | (\$ M)    | (Each)  | (\$ M)        | (\$ M)    | (Each)  | (\$ M)        | (\$ M)    | (Each)    | (\$ M)        | (\$ M)    | (Each)   | (\$ M)        | (\$ M)    | (Each)   | (\$ M)        |
| Uncategorized   |          |               |           |           |               |           |         |               |           |         |               |           |           |               |           |          |               |           |          |               |
| DEFENSE JOINT<br>COUNTERINTELLIGE<br>PROGRAM PE<br>0305146F | A<br>NCE |               | -         | -         | -             | -         | -       | 0.460         | -         | -       | 0.711         | -         | -         | 1.181         | -         | -        | 0.000         | -         | -        | 1.181         |
| Subtotal: Uncategorized                                     |          |               | -         | -         | -             | -         | -       | 0.460         | -         | -       | 0.711         | -         | -         | 1.181         | -         | -        | 0.000         | -         | -        | 1.181         |
| Total   |          |               | -         | -         | -             | -         | -       | 0.460         | -         | -       | 0.711         | -         | -         | 1.181         | -         | -        | 0.000         | -         | -        | 1.181         |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ems: FY 2018 Air Force        | Date: May 2017                     |
|---|-------------------------------|------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | P-1 Line Item Number / Title: | Aggregated Items Title:            |
| 3080F / 03 / 2  |                               | Integrated Broadcast Service (IBS) |

|                                |          |         |             |               |                         |                |               |                         | •         |               | •                       | •         |               |                         |           | •                    |                         |           | `             | ,                       |
|--------------------------------|----------|---------|-------------|---------------|-------------------------|----------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
|                                |          |         | Р           | rior Year     | 's                      |                | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | / 2018 OC            | :0                      | FY        | ′ 2018 Tot    | al                      |
| Item Number /<br>Title [DODIC] | ID<br>CD |         | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost      | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                  |          |         |             |               |                         |                | ,             |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |
| IBS-NS PE 1203179F             | Α        |         | -           | -             | -                       | -              | -             | 1.905                   | -         | -             | 4.003                   | -         | -             | 4.000                   | -         | -                    | -                       | -         | -             | 4.000                   |
| Subtotal: Uncategorized        |          |         | -           | -             | -                       | -              | -             | 1.905                   | -         | -             | 4.003                   | -         | -             | 4.000                   | -         | -                    | -                       | -         | -             | 4.000                   |
| Total                          |          |         | -           | -             | -                       | -              | -             | 1.905                   | -         | -             | 4.003                   | -         | -             | 4.000                   | -         | -                    | -                       | -         | -             | 4.000                   |
| Matai Cubtatala az Tat         | من مام   | thin Ex | hibit D 40a | many mat ha   | avant ar a              | una assanths s | dira ta zarra | مانت م                  | •         |               |                         |           |               |                         | •         |                      |                         | •         |               |                         |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

(6) IBS-NS: Capital equipment replacement of the Global IBS Servers (GINS), Theater Interface Nodes (TINS), CIB Uplink Sites (CUS), and IBS Network equipment

**Date:** May 2017 Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Modification Items Title: 3080F / 03 / 2

832070 / Intelligence Comm Equipment

Integrated Broadcast Service (IBS)

|                       |    | Р         | rior Year     | s                       |           | FY 2016              | 6 FY 2017               |           |                      | FY                      | ′ 2018 Ba | se                   | FY 2018 OCO             |           |                      | FY 2018 Total           |           |               |                         |
|-----------------------|----|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title   | ID | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Mod 1 IBS / Mod 1 IBS |    | -         | -             | 5.258                   | -         | -                    | 1.548                   | -         | -                    | 3.741                   | -         | -                    | 3.354                   | -         | -                    | 0.000                   | -         | -             | 3.354                   |
| Mod 2 / Mod 2         |    | -         | -             | 6.275                   | -         | -                    | 3.167                   | -         | -                    | 3.167                   | -         | -                    | 3.133                   | -         | -                    | 0.000                   | -         | -             | 3.133                   |
| Mod 3 / Mod 3         |    | -         | -             | 2.572                   | -         | -                    | 0.816                   | -         | -                    | 1.298                   | -         | -                    | 1.463                   | -         | -                    | 0.000                   | -         | -             | 1.463                   |
| Mod 4 / Mod 4         |    | -         | -             | 4.165                   | -         | -                    | 2.102                   | -         | -                    | 2.370                   | -         | -                    | 2.276                   | -         | -                    | 0.000                   | -         | -             | 2.276                   |
| Mod 5 / Mod 5         |    | -         | -             | 2.933                   | -         | -                    | 5.473                   | -         | -                    | 1.873                   | -         | -                    | 3.057                   | -         | -                    | 0.000                   | -         | -             | 3.057                   |
| Total                 |    | -         | -             | 21.203                  | -         | -                    | 13.106                  | -         | -                    | 12.449                  | -         | -                    | 13.283                  | -         | -                    | 0.000                   | -         | -             | 13.283                  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### **Modification Information:**

| Item Number / Title   | Models of Systems Affected | Modification Type      |
|-----------------------|----------------------------|------------------------|
| Mod 1 IBS / Mod 1 IBS | IBS                        | Capability Improvement |
| Mod 2 / Mod 2         | IBS                        | Capability Improvement |
| Mod 3 / Mod 3         | IBS                        | Capability Improvement |
| Mod 4 / Mod 4         | IBS                        | Capability Improvement |
| Mod 5 / Mod 5         | IBS                        | Capability Improvement |

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

P-1 Line Item Number / Title:

3080F / 03 / 2

832070 / Intelligence Comm Equipment

**Aggregated Modification Items Title:**Military Intelligence Program (MIP)

Activities

**Date:** May 2017

|                     |    |                       | Prior Years |               |                         | FY 2016   |               |                         | FY 2017   |               |                         | FY 2018 Base |               |                         | FY 2018 OCO |               |                         | FY 2018 Total |               |                         |
|---------------------|----|-----------------------|-------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|--------------|---------------|-------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|
| Item Number / Title | ID | MDAP/<br>MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| MIP1 / JWICS        |    |                       | -           | -             | 3.920                   | -         | -             | 2.900                   | -         | -             | 4.516                   | -            | -             | 4.434                   | -           | -             | 0.000                   | -             | -             | 4.434                   |
| Total               |    |                       | -           | -             | 3.920                   | -         |               | 2.900                   | -         | -             | 4.516                   | -            | -             | 4.434                   | -           | -             | 0.000                   | -             | -             | 4.434                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

## **Modification Information:**

| Item Number / Title | Models of Systems Affected | Modification Type             |
|---------------------|----------------------------|-------------------------------|
| MIP1 / JWICS        | 0301592F                   | Reliability & Maintainability |

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Modification Items Title:

3080F / 03 / 2 832070 / Intelligence Comm Equipment

Network-Centric Collaborative Targeting

|   |    |                       |           |               |                         |           | <u> </u>      |                         |           |                      |                         |              |               |                         |             |               |                         |               |               |                         |  |
|---|----|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|--------------|---------------|-------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|--|
|   |    |                       | Р         | Prior Years   |                         | FY 2016   |               |                         |           | FY 2017              |                         | FY 2018 Base |               |                         | FY 2018 OCO |               |                         | FY 2018 Total |               |                         |  |
| Item Number / Title                       | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |  |
| NCCT1 / Replacement of<br>Ground Stations |    |                       | -         | -             | 2.970                   | -         | -             | 3.517                   | -         | -                    | 2.583                   | -            | -             | 3.312                   | -           | -             | 0.000                   | -             | -             | 3.312                   |  |
| Total                                     |    |                       | -         | -             | 2.970                   |           | -             | 3.517                   | -         | -                    | 2.583                   | -            | -             | 3.312                   | -           | -             | 0.000                   | -             | -             | 3.312                   |  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

## **Modification Information:**

| Item Number / Title                       | Models of Systems Affected | Modification Type             |
|---|----------------------------|-------------------------------|
| NCCT1 / Replacement of Ground<br>Stations | NA                         | Reliability & Maintainability |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>832070 / Intelligence Comm EquipmentAggregated Items Title:<br/>Intelligence Mission Data (IMD)

| 30001 7 03 7 2  |          |                       |           |               |                         |           |               | 3320101                 | intellige | nice Con      | ıııı Equi               | pinent       |               | intelligence iviission bata (livib) |             |               |                         |               |               |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|--------------|---------------|-------------------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|
|   |          |                       | P         | Prior Years   |                         |           | FY 2016       |                         | FY 2017   |               |                         | FY 2018 Base |               |                                     | FY 2018 OCO |               |                         | FY 2018 Total |               |                         |
| Item Number /<br>Title [DODIC]                        | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M)             | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Intelligence Mission Data                             | (IMD)    | )                     |           |               |                         |           |               |                         |           |               |                         |              |               |                                     |             |               | ,                       |               |               | •                       |
| Operational<br>Reconnaissance Data<br>Automation      | А        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -            | -             | 0.500                               | -           | -             | -                       | -             | -             | 0.500                   |
| Intelligence Mission Data (IMD) Advanced NCTR Collect | А        |                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -            | -             | 0.813                               | -           | -             | 0.000                   | -             | -             | 0.813                   |
| Subtotal: Intelligence Mis<br>(IMD)                   | sion     | Data                  | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -            | -             | 1.313                               | -           | -             | 0.000                   | -             | -             | 1.313                   |
| Total   |          |                       | -         | -             | 0.000                   |           | -             | 0.000                   | -         | -             | 0.000                   | -            | -             | 1.313                               | -           | -             | 0.000                   | -             | -             | 1.313                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force   | Date: May 2017   |
|---|---|--|
|   | P-1 Line Item Number / Title:<br>832070 / Intelligence Comm Equipment | Aggregated Items Title: Space Superiority Intelligence |

|  |          |                       |           |               |                         |           |               |                         |           |                      |                         |              |                      |                         | 1 1 2       |               |                         |               |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|--------------|----------------------|-------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|
|  |          |                       | P         | rior Year     | s                       | FY 2016   |               |                         | FY 2017   |                      |                         | FY 2018 Base |                      |                         | FY 2018 OCO |               |                         | FY 2018 Total |               | tal                     |
| Item Number /<br>Title [DODIC]                   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                                    |          |                       |           |               |                         |           |               |                         |           |                      |                         |              |                      |                         |             |               |                         |               |               |                         |
| Space Superiority<br>Intelligence PE<br>0301400F | A        |                       | -         | -             | -                       | -         | -             | 3.490                   | -         |                      | 0.000                   | -            | -                    | 0.000                   | -           | -             | -                       | -             | -             | 0.000                   |
| Subtotal: Uncategorized                          |          |                       | -         | -             | -                       | -         | -             | 3.490                   | -         | -                    | 0.000                   | -            | -                    | 0.000                   | -           | -             | -                       | -             | -             | 0.000                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 3.490                   | -         | -                    | 0.000                   | -            | -                    | 0.000                   | -           | -             | -                       | -             | -             | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force                | Date: May 2017                 |
|---|--------------------------------------|--------------------------------|
|   | P-1 Line Item Number / Title:        | Aggregated Items Title:        |
| 3080F / 03 / 2  | 832070 / Intelligence Comm Equipment | Space Superiority Intelligence |

|                                |          |                       |             |               |                         |              |               |                         | U         |               |                         | •         |               |                         |           |               | ,                       | U         |               |                         |  |
|--------------------------------|----------|-----------------------|-------------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|--|
|                                |          |                       | F           | Prior Year    | 's                      |              | FY 2016       | 6 FY 2017               |           |               |                         | FY        | / 2018 Bas    | se                      | FY        | FY 2018 OCO   |                         |           | FY 2018 Total |                         |  |
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |  |
| Space Superiority Intel        |          |                       |             |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |  |
| New Item                       | Α        |                       | -           | -             | -                       | -            | -             | -                       | -         | -             | -                       | -         | -             | -                       | 2.000     | 1             | 2.000                   | 2.000     | 1             | 2.000                   |  |
| Subtotal: Space Superio        | rity In  | tel                   | -           | -             | -                       | -            | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 2.000                   | -         | -             | 2.000                   |  |
| Total                          |          |                       | -           | -             | -                       | -            | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 2.000                   | -         | -             | 2.000                   |  |
| Moto: Subtotala or To          | tale ir  | thic Ev               | hihit D 10a | may not he    | avoot or a              | im avaatly d | lua ta rauna  | lina                    |           |               |                         |           |               |                         |           |               |                         |           |               |                         |  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833010 / Air Traffic Control & Landing Sys

Equip / BSA 3: Electronics Programs ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Itom MDAD/MAIS Code: N/A

|  | Prior         |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |         |
|--|---------------|------------------|-------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|---------|
| Resource Summary                               | Years         | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -             | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | 12.434        | 28.823           | 121.853           | 66.143           | 56.500           | 122.643        | 57.962          | 58.334         | 66.071  | 74.915  | -        | 543.035 |
| Less PY Advance Procurement (\$ in Millions)   | -             | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | 12.434        | 28.823           | 121.853           | 66.143           | 56.500           | 122.643        | 57.962          | 58.334         | 66.071  | 74.915  | -        | 543.035 |
| Plus CY Advance Procurement (\$ in Millions)   | -             | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | 12.434        | 28.823           | 121.853           | 66.143           | 56.500           | 122.643        | 57.962          | 58.334         | 66.071  | 74.915  | -        | 543.035 |
| (The following                                 | Resource Sumi | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -             | 1.011            | 3.406             | 3.131            | -                | 3.131          | 0.939           | 0.957          | 3.143   | 3.201   | -        | 15.788  |
| Flyaway Unit Cost (\$ in Millions)             | -             | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -             | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -       |

### **Description:**

Air Traffic Control and Landing Systems (ATCALS) procures and supports fixed-base and tactical radar, navigation aids, voice communications, and data processing/automation capabilities which enables Air Force (AF) air traffic controllers to provide advisory, seguencing, separation, and landing guidance services to all aircraft in AF-assigned airspace. In support of Global Mobility, Agile Combat Support, Global Strike, Homeland Security, and Global Response concepts of operation, ATCALS centrally manages the Air Force's Air Traffic Control capability to ensure Air Traffic Control facilities/equipment can safely and expeditiously support en route and terminal operations in benign and combat areas of responsibility. ATCALS operational and training systems must be interoperable with systems operated by other services, the Federal Aviation Administration (FAA), or host nations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

AIR TRAFFIC CONTROL AND AIRFIELD OPERATIONS (ATC OPS): ATC OPS provides for procurement of new systems and replacement, modification, or mitigation of diminishing manufacturing source issues of legacy ATC navigation and landing systems, as well as related voice communications, data processing/automation systems, and ancillary equipment such as ATC digital audio legal recorders, flight data input/ output systems, electronic flight strip systems, air traffic information systems, instrument procedures, and airfield management systems. A key element of ATC OPS is the ATCALS Fixed Base (FB) Navigational Aids (NAVAIDs) Family of Systems (FOS) replacement program, which combines organizational realignments, process improvements, and investments in state-of-the-art commercial-off-the-shelf technology to replace legacy fixed and deployable equipment. The FB NAVAIDS FOS replacement program includes the fixed base Very High Frequency (VHF) Omnidirectional Range System (VOR), Tactical Air Navigation (TACAN), and VORTAC (combined VOR/TACAN), Deployable TACAN, and Digital ATC radios. ATC OPS also includes procurement of a new Deployable Instrument Landing System (D-ILS) and Deployable Radar Approach Control (D-RAPCON) which will replace 1960/1970s era legacy systems. These investments will result in significant manpower and operations/maintenance savings over the next 20 years.

1. DIGITAL AIR TRAFFIC CONTROL (ATC) RADIO REPLACEMENT: The ATC ground-to-air VHF and Ultra High Frequency (UHF) radios are 30 years old and difficult to maintain. The Digital ATC Radio Replacement Program will replace ATC fixed-base radios with state-of-the-art systems that will include a remote maintenance capability and 8.33kHz channel spacing (mandatory requirement in Europe by FY2018). In order to ensure system common logistics support and training, ATC radios are being procured as a centrally managed item by the Air Force Life Cycle Management Center at Tinker AFB. Approximately 5,200 radios will be replaced.

> UNCLASSIFIED Page 1 of 18

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833010 / Air Traffic Control & Landing Sys

Equip / BSA 3: Electronics Programs ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

- 2. ATCALS Fixed Base (FB) Navigational Aids (NAVAIDS) FoS: The FB NAVAIDS FOS replaces the current 1970s era systems which have reached the end of their normal lifespan, are manpower intensive, and costly to support. New systems will include remote maintenance, monitoring, alignment, and flight inspection support capabilities via Remote Maintenance Centers (RMC). One VOR (1 AD), 28 VORTACs (25 AD/1 ANG/2 AFR), and 92 fixed-based TACANs (76 AD/10 ANG/6 AFR) will be procured from FY2012 through FY2018.
- 3. DEPLOYABLE INSTRUMENT LANDING SYSTEM (D-ILS): D-ILS is a deployable Category I (200ft decision height/2400ft runway visual range) ILS with remote monitoring and maintenance capabilities. D-ILS will provide precision approach capability in adverse weather conditions to support tactical military and worldwide humanitarian/disaster relief operations and provide interoperability with the Civil Reserve Air Fleet in the area of responsibility. D-ILS replaces the current Air Force mobile Precision Approach Radar (PAR) system. These systems were procured in the 1970s, are manpower intensive, and logistically unsupportable. On average, only four of 14 mobile PAR systems are operational on a daily basis and none are fully mission capable. Two ILSs are required to replace each PAR, one for each end of the primary runway (the mobile PAR is mounted on a turntable which allows it to be rotated to cover the operational runway end). A total of 30 D-ILSs will be procured to replace four Active Duty and ten Air National Guard (ANG) mobile PARs. One training system and one depot rotable system will also be procured. D-ILS is normally deployed with the Deployable Radar Approach Control System, a mobile Air Traffic Control Tower, and mobile TACAN.
- 4. DEPLOYABLE RADAR APPROACH CONTROL SYSTEM (D-RAPCON): D-RAPCON will replace the 1960/1970s era AN/MPN-14K and AN/TPN-19 Airport Surveillance Radar and Operations Shelter subsystems with state-of-the-art digital systems. Modification and overhaul of the existing systems has proven to be ineffective due to diminishing manufacturing sources. On average, due to systemic equipment failures, no more than four of the existing 14 systems are deployable at any given time and none are fully mission capable. The current AN/TPN-19 (four systems) and AN/MPN-14K (ten systems) operational availability rates are 25% and 60% respectively versus the D-RAPCON requirement of 98%. D-RAPCON will provide aircraft surveillance/sequencing, air traffic control communications, and automation capabilities for terminal area air traffic control operations. D-RAPCON will also be deployed with a D-ILS, mobile control tower, and mobile TACAN to provide a complete air traffic control capability. The D-RAPCON will support tactical military and worldwide humanitarian operations and also support domestic disaster relief. The primary surveillance radar coverage (non-cooperative targets) is out to 60 nautical miles (nm) and the secondary surveillance radar coverage (cooperative targets) will increase from 120 nm up to 200 nm. Due to diminishing manufacturing sources, life of type purchases will be required each year. A total of 16 D-RAPCONs will be procured. Four for the Active Duty (three for the 53rd ir Traffic Control Squadron (ATCS) at Robins AFB, one for the 1st ATCS at Ramstein AF, one trainer, and one depot rotable) and one for each of 10 ANG ATCSs.

Current year funding totals include \$42.650M appropriated for Overseas Contingency Operations.

Funding for this exhibit is contained in Program Element (PE) 0305114F.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 154     | 1,317   | 206             | 1              | 207              | 102     | 325     | 617     | 939     |
|                        | Total Obligation Authority | 26.883  | 90.233  | 66.143          | 16.840         | 82.983           | 29.392  | 26.263  | 23.057  | 32.971  |
| AFNG                   | Quantity                   | 4       | 6       | 0               | 7              | 7                | 52      | 202     | 202     | 106     |
|                        | Total Obligation Authority | 1.552   | 31.620  | 0.000           | 39.660         | 39.660           | 27.754  | 31.792  | 32.419  | 31.016  |
| AFR                    | Quantity                   | 1       | 0       | 0               | 0              | 0                | 40      | 50      | 0       | 0       |
|                        | Total Obligation Authority | 0.388   | 0.000   | 0.000           | 0.000          | 0.000            | 0.816   | 1.017   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 159     | 1,323   | 206             | 8              | 214              | 194     | 577     | 819     | 1,045   |
| Secondary Distribution | Total Obligation Authority | 28.823  | 121.853 | 66.143          | 56.500         | 122.643          | 57.962  | 59.072  | 55.476  | 63.987  |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833010 / Air Traffic Control & Landing Sys

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule                             |             |            |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|---|-------------|------------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*  | Subexhibits | ID<br>CD   | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Digital Air Traffic Control Radio Replacement |             |            |                       | - / -                                    | - /2.590                                 | - /26.682                                | - / 3.599                                | - / -                                    | - / 3.599                                |
| P-5             | Deployable Radar Approach Control (D-RAPCON)  | P-5a, P-21  | Α          |                       | - / -                                    | - / -                                    | 2 / 24.866                               | 2 / 48.579                               | 1 / 16.500                               | 3 / 65.079                               |
| P-5             | FB NAVAIDs FOS TACAN/VORTAC                   |             | Α          |                       | - / 12.434                               | 20 / 10.400                              | 30 / 16.249                              | 21 / 9.927                               | - / 0.000                                | 21 / 9.927                               |
| P-5             | D-ILS   | P-5a, P-21  | Α          |                       | - / -                                    | 3 / 15.833                               | 9 / 54.056                               | - /4.038                                 | 7 / 40.000                               | 7 / 44.038                               |
| P-40            | Total Gross/Weapon System Cost                |             | - / 12.434 | - / 28.823            | - / 121.853                              | - / 66.143                               | - / 56.500                               | - / 122.643                              |  |  |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

- 1. DIGITAL AIR TRAFFIC CONTROL (ATC) RADIO REPLACEMENT: FY18 funds procure 183 systems (183 AD/0 ANG/0 AFR).
- 2. ATCALS Fixed Base (FB) Navigational Aids (NAVAIDs) Family of Systems (FoS): FY18 funds procure 12 TACANs (12 AD/0 ANG/0 AFR) and 9 VORTACs (9 AD/0 ANG/0 AFR).
- 3. DEPLOYABLE INSTRUMENT LANDING SYSTEM (D-ILS): FY18 base funds provide direct mission support and maintain program office; FY18 OCO funds procure 7 systems (1 AD/6 ANG/0 AFR).
- 4. DEPLOYABLE RADAR APPROACH CONTROL (D-RAPCON): FY18 base funds procure 2 systems (2 AD/0 ANG/0 AFR); FY18 OCO funds procure 1 system (0 AD/1 ANG/0 AFR).

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 03 / 3

833010 / Air Traffic Control & Landing Sys

**Aggregated Items Title:**Digital Air Traffic Control Radio

Replacement

|  |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           | •             |                         |           |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | F         | Y 2018 OC     | o                       | FY        | ' 2018 Tot    | al                      |
| Item Number /<br>Title [DODIC]                   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Digital Air Traffic Control                      | (ATC     | ) Radio               |           |               | ,                       | ,         |               |                         | '         |               |                         | <u> </u>  |               |                         |           | ,             |                         | '         |               |                         |
| Single Channel ATCI<br>Radio                     | А        |                       | -         | -             | -                       | 0.019     | 136           | 2.590                   | 0.019     | 562           | 10.862                  | 0.020     | 183           | 3.599                   | -         | -             | -                       | 0.020     | 183           | 3.599                   |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | 136           | 2.590                   |           | 562           | 10.862                  |           | 183           | 3.599                   |           | -             | -                       |           | 183           | 3.599                   |
| Tunable Transceiver<br>ATC Radio                 | Α        |                       | -         | -             | -                       | -         | -             | -                       | 0.027     | 480           | 12.760                  | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           | ·             |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | 480           | 12.760                  |           | -             | -                       |           | -             | -                       |           | -             | -                       |
| Tunable Transceiver<br>ATC Radio Control<br>Unit | Α        |                       | -         | -             | -                       | -         | -             | -                       | 0.013     | 240           | 3.060                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         | ,         |               | ,                       | ,         |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | 240           | 3.060                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |
| Subtotal: Digital Air Traffi<br>(ATC) Radio      | ic Co    | ntrol                 | -         | -             | -                       | -         | -             | 2.590                   | -         | -             | 26.682                  | -         | -             | 3.599                   | -         | -             | -                       | -         | -             | 3.599                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 2.590                   | -         | -             | 26.682                  | -         | -             | 3.599                   | -         | -             | -                       | -         | -             | 3.599                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks

Radios are identified in supply system as centrally managed are being procured by the Air Force Life cycle Management Center at Tinker AFB through an FAA contract awarded to General Dynamics with fixed price options extending through 2022.

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 3

P-1 Line Item Number / Title:
833010 / Air Traffic Control & Landing Sys

Item Number / Title [DODIC]:
- / Deployable Radar Approach Control (D-RAPCON)

| ID Code (A=Service Ready, B=Not Service Ready): A        |                             |                         | MDAP/MAIS Code:              |              |             |               |
|--|-----------------------------|-------------------------|------------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                 | FY 2017                      | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | -                       | 2                            | 2            | 1           | 3             |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | -                       | 24.866                       | 48.579       | 16.500      | 65.079        |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                       | -                            | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | -                       | 24.866                       | 48.579       | 16.500      | 65.079        |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                       | -                            | -            | =           | -             |
| Total Obligation Authority (\$ in Millions)              | -                           | -                       | 24.866                       | 48.579       | 16.500      | 65.079        |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reque | ests are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                       | 1.009                        | 1.294        | 0.000       | 1.294         |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | -                       | 12.433                       | 24.290       | 16.500      | 21.693        |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | P         | rior Years    | 5                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ' 2018 Bas           | se                      | FY        | ′ 2018 OC     | :0                      | F۱        | ' 2018 Tot    | .al                     |
|---|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements                                     | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - D-RAPCON Cost                          |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |
| Recurring Cost                                    |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |
| PME Refurbished Unit<br>Active Duty               | -         | -             | -                       | -         | -             | -                       | 3.571     | 1             | 3.571                   | -         | -                    | -                       | -         | -             | -                       | -         | -             |                         |
| PME Production Unit<br>Active Duty <sup>(†)</sup> | -         | -             | -                       | -         | -             | -                       | 14.933    | 1             | 14.933                  | 12.780    | 2                    | 25.560                  | -         | -             | -                       | 12.780    | 2             | 25.5                    |
| PME Production Unit                               | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | 12.780    | 1             | 12.780                  | 12.780    | 1             | 12.7                    |
| Subtotal: Recurring Cost                          | -         | -             | -                       | -         | -             | -                       | -         | -             | 18.504                  | -         | -                    | 25.560                  | -         | -             | 12.780                  | -         | -             | 38.3                    |
| Subtotal: Hardware - D-<br>RAPCON Cost            | -         | -             | -                       | -         | -             | -                       | -         | -             | 18.504                  | -         | -                    | 25.560                  | -         | -             | 12.780                  | -         | -             | 38.3                    |
| Support - D-RAPCON Cost                           |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |
| Other Procurement Cost                            | -         | -             | -                       | -         | -             | -                       | -         | -             | 5.287                   | -         | -                    | 17.742                  | -         | -             | 1.878                   | -         | -             | 19.6                    |
| Direct Mission Support/<br>GFE                    | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.462                   | -         | -                    | 1.741                   | -         | -             | 1.282                   | -         | -             | 3.0                     |
| PMA Contractor Services<br>AFLCMC (Hanscom AFB)   | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.161                   | -         | -                    | 1.993                   | -         | -             | -                       | -         | -             | 1.9                     |
| PMA Other Government<br>Costs                     | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.452                   | -         | -                    | 1.543                   | -         | -             | 0.560                   | -         | -             | 2.1                     |
| Subtotal: Support - D-<br>RAPCON Cost             | -         | -             | -                       | -         | -             | -                       | -         | -             | 6.362                   | -         | -                    | 23.019                  | -         | -             | 3.720                   | -         | -             | 26.7                    |
| Gross/Weapon System<br>Cost                       | -         | -             | -                       | -         | -             | -                       | 12.433    | 2             | 24.866                  | 24.290    | 2                    | 48.579                  | 16.500    | 1             | 16.500                  | 21.693    | 3             | 65.0                    |

UNCLASSIFIED
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| Exhibit P-5, Cost Analysis: FY 2018 Air Force                         |   | Date: May 2017  |
|---|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 | P-1 Line Item Number / Title:<br>833010 / Air Traffic Control & Landing Sys | Item Number / Title [DODIC]: - / Deployable Radar Approach Control (D-RAPCON) |

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

#### Remarks:

Unit cost difference: FY17 funds procure one production system (\$14.9M) and one preproduction system (\$3.6M). FY18 funding procures two production systems at unit cost of \$12.780M for a total of \$25.560M. FY18 funding also includes \$8.6M for standup of organic depot.

| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF                     | Quantity                   | -       | 2       | 2               | 0              | 2                |
|                        | Total Obligation Authority | -       | 24.866  | 48.579          | 3.720          | 52.299           |
| AFNG                   | Quantity                   | -       | 0       | 0               | 1              | 1                |
|                        | Total Obligation Authority | -       | 0.000   | 0.000           | 12.780         | 12.780           |
| AFR                    | Quantity                   | -       | 0       | 0               | 0              | 0                |
|                        | Total Obligation Authority | -       | 0.000   | 0.000           | 0.000          | 0.000            |
| Total:                 | Quantity                   | -       | 2       | 2               | 1              | 3                |
| Secondary Distribution | Total Obligation Authority | -       | 24.866  | 48.579          | 16.500         | 65.079           |

<sup>(†)</sup> indicates the presence of a P-5a

| Exhibit P-5a, Procurement History and Planning: FY 2018               | Air Force   | Date: May 2017  |
|---|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 | P-1 Line Item Number / Title:<br>833010 / Air Traffic Control & Landing Sys | Item Number / Title [DODIC]: - / Deployable Radar Approach Control (D-RAPCON) |

|  | 0 |      |                             | Method/Type           |                    |               | Date                 |                      |           | Specs      | Date                  | DED :             |
|--|---|------|-----------------------------|-----------------------|--------------------|---------------|----------------------|----------------------|-----------|------------|-----------------------|-------------------|
| Cost Elements                                  | 0 | FY   | Contractor and Location     | or<br>Funding Vehicle | Location of PCO    | Award<br>Date | of First<br>Delivery | <b>Qty</b><br>(Each) | Unit Cost | Avail Now? | Revision<br>Available | RFP Issue<br>Date |
| PME Production Unit Active Duty <sup>(†)</sup> |   | 2017 | Raytheon IDS / Marlboro, MA | C / FPIF              | AFLCMC Hanscom AFB | Jan 2018      | Mar 2019             | 1                    | 14.933    | Y          |                       | Sep 2016          |
| PME Production Unit Active Duty <sup>(†)</sup> |   | 2018 | Raytheon IDS / Marlboro, MA | C / FPIF              | AFLCMC Hanscom AFB | Jul 2018      | Jun 2019             | 2                    | 12.780    | Y          |                       | Sep 2016          |
| PME Production Unit ANG <sup>(†)</sup>         | 1 | 2018 | Raytheon IDS / Marlboro, MA | C / FPIF              | AFLCMC Hanscom AFB | Jul 2018      | Oct 2019             | 1                    | 12.780    | Y          |                       | Sep 2016          |

<sup>(†)</sup> indicates the presence of a P-21

| Exi | hik              | oit F   | P-21, Pro          | oduct               | ion Sc                       | hedu                         | le: F       | / 2018      | 3 Air I     | Force       |             |             |                       |             |             |          |             |             |             |             |             |             |             | Date        | e: Ma       | y 201       | 7                     |        |                |             |             |
|-----|------------------|---------|--------------------|---------------------|------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------------|-------------|-------------|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------------|--------|----------------|-------------|-------------|
|     |                  |         | iation /<br>03 / 3 | Budg                | et Acti                      | vity /                       | Budç        | get Sı      | ıb Ac       | tivity      | :           |             | <b>Line</b><br>3010 / |             |             |          |             | andin       | g Sy        | s           |             |             |             | - / D       |             | able l      | <b>Title</b><br>Radar |        | DIC]:<br>roach | Conti       | rol         |
|     |                  |         |                    | lements<br>in Each) |                              |                              |             |             |             |             |             | Fiscal Y    | ear 2018              |             |             |          |             |             |             |             |             |             |             | Fiscal Y    | ear 2019    |             |                       |        |                |             | В           |
|     |                  |         |                    |                     | ACCEPT                       |                              |             |             |             |             |             |             |                       | (           | Calendar    | Year 201 | 8           |             |             |             |             |             |             |             | Caler       | ndar Year   | 2019                  |        |                |             | Ĺ           |
| O F | M<br>F<br>R<br># | FY      | SERVICE            | PROC<br>QTY         | PRIOR<br>TO 1<br>OCT<br>2017 | BAL<br>DUE<br>AS OF<br>1 OCT | 0<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R           | M<br>A<br>Y | J<br>U<br>N | J<br>J   | A<br>U<br>G | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N           | n<br>n | A<br>U<br>G    | S<br>E<br>P | A<br>N<br>C |
| PME | E Pro            | oductio | on Unit Active     | Duty                |                              |                              |             |             |             |             |             |             |                       |             |             |          |             |             |             |             |             |             |             |             |             |             |                       |        |                |             |             |
| 1   | 1 2              | 2017    | AF                 | 1                   | 0                            | 1                            |             | _           |             | Α -         | -           | -           | -                     | -           | -           | -        | -           | -           | -           | -           | -           | -           | -           | 1           |             |             |                       |        |                |             |             |
| 1   | 1 2              | 2018    | AF                 | 2                   | 0                            | 2                            |             |             |             |             |             |             |                       |             | ,           | Α -      | -           | -           | -           | -           | -           | - 1         | -           | -           | -           | -           | 1                     | -      | 1              |             |             |
| PME | E Pro            | oductio | on Unit ANG        | •                   | ,                            |                              |             |             |             |             |             |             |                       |             |             |          |             | ·           |             |             |             |             |             | •           |             |             |                       |        |                |             |             |
| 1 2 | 2 2              | 2018    | AF                 | 1                   | 0                            | 1                            |             |             |             |             |             |             |                       |             |             | Α -      | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -                     | -      | -              | -           |             |
|     | •                |         |                    |                     |                              |                              | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R           | M<br>A<br>Y | J<br>U      | J<br>J   | A<br>U<br>G | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | N<br>N                | J<br>J | A<br>U<br>G    | S<br>E<br>P |             |

| E  | xhi         | bit F   | P-21, Pr           | oduct               | ion Sc                       | hedu                         | le: F       | Y 201       | 8 Air       | Force       |             |             |                         |             |             |          |             |             |             |             |             |             |             | Dat         | e: Ma       | y 201       | 7           |             |                |             |                  |
|----|-------------|---------|--------------------|---------------------|------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------------|-------------|-------------|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|------------------|
|    |             | •       | iation /<br>03 / 3 | Budg                | et Acti                      | vity /                       | Budç        | get S       | ub Ac       | ctivity     | <b>'</b> :  |             | I <b>Line</b><br>3010 / |             |             |          |             |             | ng Sy       | s           |             |             |             | - / D       |             |             |             |             | DIC]:<br>roach | Cont        | rol              |
|    |             |         |                    | lements<br>in Each) |                              |                              |             |             |             |             |             | Fiscal Y    | ear 2020)               |             |             |          |             |             |             |             |             |             |             | Fiscal \    | ear 2021    | 1           |             |             |                |             | В                |
|    |             |         |                    |                     | ACCEPT                       |                              |             |             |             |             |             |             |                         | c           | Calendar    | Year 202 | 20          |             |             |             |             |             |             |             | Cale        | ndar Yea    | r 2021      |             |                |             | L                |
| 0  | F<br>R<br># | FY      | SERVICE            | PROC<br>QTY         | PRIOR<br>TO 1<br>OCT<br>2019 | BAL<br>DUE<br>AS OF<br>1 OCT | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R             | M<br>A<br>Y | J<br>U<br>N | J<br>J   | A<br>U<br>G | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U      | J<br>U      | A<br>U<br>G    | S<br>E<br>P | A<br>N<br>C<br>E |
| PI | ME P        | roducti | on Unit Active     | Duty                |                              |                              |             |             |             |             |             |             |                         |             |             |          |             |             |             |             |             |             |             |             |             |             |             |             |                |             |                  |
|    | 1           | 2017    | AF                 | 1                   | 1                            | 0                            |             |             |             |             |             |             |                         |             |             |          |             |             |             |             |             |             |             |             |             |             |             |             |                |             | (                |
|    | 1           | 2018    | AF                 | 2                   | 2 2                          | 0                            |             |             |             |             |             |             |                         |             |             |          |             |             |             |             |             |             |             |             |             |             |             |             |                |             | (                |
| PI | ME P        | roducti | on Unit ANG        |                     |                              |                              |             |             |             |             |             |             |                         |             |             |          |             |             |             |             |             |             |             |             |             |             |             |             |                |             | <u> </u>         |
| ✓  | 2           | 2018    | AF                 | 1                   | 0                            | 1                            | 1           |             |             |             |             |             |                         |             |             |          |             |             |             |             |             |             |             |             |             |             |             |             |                |             | (                |
|    | ,           |         |                    | •                   | •                            | ,                            | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R             | M<br>A<br>Y | J<br>U<br>N | J<br>U   | A<br>U<br>G | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G    | S<br>E<br>P |                  |

| Exhibit P-21, Production Schedule: FY 2018 Air Force                  |   | Date: May 2017  |
|---|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 | P-1 Line Item Number / Title:<br>833010 / Air Traffic Control & Landing Sys | Item Number / Title [DODIC]: - / Deployable Radar Approach Control (D-RAPCON) |

|     |                             | Produc       | ction Rates (Each | / Year)      |                |             |               | Procurement Le | adtime (Months) |             |               |             |
|-----|-----------------------------|--------------|-------------------|--------------|----------------|-------------|---------------|----------------|-----------------|-------------|---------------|-------------|
| MFF |                             |              |                   |              |                | Ini         | tial          |                |                 | Reo         | rder          |             |
| Ref | Manufacturer                |              |                   |              | ALT            | ALT         | Manufacturing | Total          | ALT             | ALT         | Manufacturing | Total       |
| #   | Name - Location             | MSR For 2018 | 1-8-5 For 2018    | MAX For 2018 | Prior to Oct 1 | After Oct 1 | PLT           | After Oct 1    | Prior to Oct 1  | After Oct 1 | PLT           | After Oct 1 |
| ,   | Raytheon IDS - Marlboro, MA | 1            | 6                 | 8            | 0              | 0           | 0             | 0              | 1               | 10          | 11            | 21          |
| 2   | Raytheon IDS - Marlboro, MA | 1            | 6                 | 8            | 0              | 0           | 0             | 0              | 1               | 10          | 15            | 25          |

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:
833010 / Air Traffic Control & Landing Sys

Item Number / Title [DODIC]:
- / FB NAVAIDs FOS TACAN/VORTAC

| ID Code (A=Service Ready, B=Not Service Ready): A        | -                           | N                        | DAP/MAIS Code:            |              |             |               |
|--|-----------------------------|--------------------------|---------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                  | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | 20                       | 30                        | 21           | -           | 21            |
| Gross/Weapon System Cost (\$ in Millions)                | 12.434                      | 10.40                    | 16.249                    | 9.927        | 0.000       | 9.927         |
| Less PY Advance Procurement (\$ in Millions)             | -                           | 0.00                     | 0.000                     | 0.000        | -           | 0.000         |
| Net Procurement (P-1) (\$ in Millions)                   | 12.434                      | 10.400                   | 16.249                    | 9.927        | 0.000       | 9.927         |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | 0.00                     | 0.000                     | 0.000        | -           | 0.000         |
| Total Obligation Authority (\$ in Millions)              | 12.434                      | 10.40                    | 16.249                    | 9.927        | 0.000       | 9.927         |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reques | ts are documented elsewhe | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | 0.95                     | 1.875                     | 1.766        | -           | 1.766         |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | 0.520                    | 0.542                     | 0.473        | -           | 0.473         |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | F           | rior Years    | 3                       |           | FY 2016              |                         |           | FY 2017              |                         | F۱        | ' 2018 Bas           | se                      | F         | <b>/ 2018 OC</b>     | 0                       | F۱        | ' 2018 Tot    | tal                     |
|--|-------------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements  | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - FB NAVAIDs FO                                     | S TACAN/VOR | TAC Cost      |                         | 1         |                      |                         | 1         |                      |                         |           |                      |                         |           |                      | 1                       | 1         |               |                         |
| Recurring Cost   |             |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               | -                       |
| FB NAVAIDs FOS<br>TACAN Replacement<br>Active Duty           | 0.381       | 15            | 5.715                   | 0.388     | 15                   | 5.820                   | 0.388     | 23                   | 8.924                   | 0.395     | 12                   | 4.740                   | -         | -                    | 0.000                   | 0.395     | 12            | 4.7                     |
| FB NAVAIDs FOS<br>TACAN Replacement<br>ANG                   | 0.381       | 5             | 1.905                   | 0.388     | 4                    | 1.552                   | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | 0.000                   | -         | -             | 0.                      |
| FB NAVAIDs FOS<br>TACAN Replacement<br>AFR                   | 0.381       | 4             | 1.524                   | 0.388     | 1                    | 0.388                   | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | 0.000                   | -         | -             | 0.                      |
| FB NAVAIDs<br>FOS VORTAC<br>Replacement Active<br>Duty       | 0.470       | 7             | 3.290                   | -         | -                    | 0.000                   | 0.470     | 7                    | 3.290                   | 0.478     | 9                    | 4.302                   | -         | -                    | 0.000                   | 0.478     | 9             | 4.                      |
| Subtotal: Recurring Cost                                     | -           | -             | 12.434                  | -         | -                    | 7.760                   | -         | -                    | 12.214                  | -         | -                    | 9.042                   | -         | -                    | 0.000                   | -         | -             | 9.                      |
| Subtotal: Hardware - FB<br>NAVAIDs FOS TACAN/<br>/ORTAC Cost | -           | -             | 12.434                  | -         | -                    | 7.760                   | -         | -                    | 12.214                  | -         | -                    | 9.042                   | -         | -                    | 0.000                   | -         | -             | 9.                      |
| Support - FB NAVAIDs FOS                                     | TACAN/VORTA | C Cost        |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |
| Tech Order Digitization                                      | -           | -             | -                       | -         | -                    | 0.000                   | -         | -                    | 0.260                   | -         | -                    | 0.000                   | -         | -                    | -                       | -         | -             | 0.                      |
| Interim Contractor<br>Support                                | -           | -             | -                       | -         | -                    | 0.000                   | -         | -                    | 0.250                   | -         | -                    | 0.000                   | -         | -                    | -                       | -         | -             | 0                       |
| Depot Activation   | -           | -             | -                       | -         | -                    | 1.000                   | -         | -                    | 1.551                   | -         | -                    | 0.204                   | -         | -                    | -                       | -         | -             | 0                       |
| Direct Mission Support                                       | -           | -             | -                       | -         | -                    | 0.664                   | -         | -                    | 0.590                   | -         | -                    | 0.275                   | -         | -                    | -                       | -         | -             | 0                       |

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Exhibit P-5, Cost Analysis: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

3080F / 03 / 3

833010 / Air Traffic Control & Landing Sys

- / FB NAVAIDs FOS TACAN/VORTAC

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ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | F         | Prior Years   | S                       |           | FY 2016              |                         |           | FY 2017              |                         | F۱        | ′ 2018 Bas           | se                      | F۱        | / 2018 OC         | 0                       | F۱        | / 2018 Tot        | al                      |
|---|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|-------------------|-------------------------|-----------|-------------------|-------------------------|
| Cost Elements   | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) |
| ATCALS PMA AFLCMC<br>(Tinker AFB) Contractor<br>Services    | -         | -             | -                       | -         | -                    | 0.650                   | -         | -                    | 0.980                   | -         | -                    | 0.000                   | -         | -                 | -                       | -         | -                 | 0.000                   |
| ATCALS PMA AFLCMC<br>(Tinker AFB) Other<br>Government Costs | -         | -             | -                       | -         | -                    | 0.205                   | -         | -                    | 0.204                   | -         | -                    | 0.201                   | -         | -                 | -                       | -         | -                 | 0.20                    |
| Installation Travel   | -         | -             | -                       | -         | -                    | 0.121                   | -         | -                    | 0.200                   | -         | -                    | 0.205                   | -         | -                 | -                       | -         | -                 | 0.20                    |
| Subtotal: Support - FB<br>NAVAIDs FOS TACAN/<br>VORTAC Cost | -         | -             | -                       | -         | -                    | 2.640                   | -         | -                    | 4.035                   | -         | -                    | 0.885                   | -         | -                 | -                       | -         | -                 | 0.88                    |
| Gross/Weapon System<br>Cost                                 | -         | -             | 12.434                  | 0.520     | 20                   | 10.400                  | 0.542     | 30                   | 16.249                  | 0.473     | 21                   | 9.927                   | -         | -                 | 0.000                   | 0.473     | 21                | 9.92                    |

| Seconda                | ry Distribution            | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF                     | Quantity                   | 15      | 30      | 21              | 0              | 21               |
|                        | Total Obligation Authority | 8.460   | 16.249  | 9.927           | 0.000          | 9.927            |
| AFNG                   | Quantity                   | 4       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 1.552   | 0.000   | 0.000           | 0.000          | 0.000            |
| AFR                    | Quantity                   | 1       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 0.388   | 0.000   | 0.000           | 0.000          | 0.000            |
| Total:                 | Quantity                   | 20      | 30      | 21              | -              | 21               |
| Secondary Distribution | Total Obligation Authority | 10.400  | 16.249  | 9.927           | 0.000          | 9.927            |

|  |                   |               |                           |                 |                      |                         | Ui           | NULASS                       |                         | •           |                |                         |           |                      |                         |           |                 |                         |
|--|-------------------|---------------|---------------------------|-----------------|----------------------|-------------------------|--------------|------------------------------|-------------------------|-------------|----------------|-------------------------|-----------|----------------------|-------------------------|-----------|-----------------|-------------------------|
| Exhibit P-5, Cost  | Analysis          | : FY 20       | 18 Air F                  | orce            |                      |                         |              |                              |                         |             |                |                         |           | Date: N              | /lay 2017               |           |                 |                         |
| Appropriation / B<br>3080F / 03 / 3                      | Budget Ad         | ctivity /     | Budget                    | Sub Acti        | vity:                | l l                     |              | <b>Number</b><br>Traffic Cor |                         |             | Sys            |                         |           | Item No              | umber / T<br>S          | itle [DO  | DIC]:           |                         |
| ID Code (A=Service Read                                  | dy, B=Not Servi   | ce Ready):    | A                         |                 |                      | I                       |              |                              | М                       | DAP/MAIS    | Code:          |                         |           |                      |                         |           |                 |                         |
|  | Resource          | Summ          | arv                       |                 |                      | Prior Yea               | ars          | FY 201                       | 16                      | FY          | 2017           | FY 2                    | 018 Bas   | se F                 | Y 2018 C                | СО        | FY 2018         | Total                   |
| Procurement Quantity (Uni                                |                   |               | <b>,</b>                  |                 |                      |                         | _            |                              | 3                       |             | 9              |                         |           | _                    |                         | 7         |                 |                         |
| Gross/Weapon System Co                                   |                   | s)            |                           |                 |                      |                         | _            |                              | 15.833                  |             | 54.056         |                         |           | 1.038                |                         | 40.000    |                 | 44.03                   |
| Less PY Advance Procure                                  | · · ·             | ·             |                           |                 |                      |                         | -            |                              | 0.000                   |             | 0.000          |                         |           | 0.000                |                         | -         |                 | 0.00                    |
| Net Procurement (P-1) (\$                                | •                 |               |                           |                 |                      |                         | -            |                              | 15.833                  |             | 54.056         |                         |           | 1.038                |                         | 40.000    |                 | 44.03                   |
| Plus CY Advance Procure                                  |                   | ions)         |                           |                 |                      |                         | -            |                              | 0.000                   |             | 0.000          |                         |           | 0.000                |                         | -         |                 | 0.00                    |
| Total Obligation Authorit                                | •                 |               |                           |                 |                      |                         | -            |                              | 15.833                  |             | 54.056         |                         |           | 1.038                |                         | 40.000    |                 | 44.03                   |
| (Ti  | he following F    | Resource Si   | ummary rov                | vs are for info | rmational p          | urposes only            | . The corres | ponding budge                | et request              | s are docum | ented elsewher | re.)                    |           |                      |                         |           |                 |                         |
| Initial Spares (\$ in Millions)                          |                   |               | •                         |                 |                      | · · · · ·               | -            |                              | 0.000                   |             | 0.446          |                         | (         | 0.000                |                         | 0.000     |                 | 0.00                    |
| Gross/Weapon System Ur                                   | nit Cost (\$ in N | fillions)     |                           |                 |                      |                         | -            |                              | 5.278                   |             | 6.006          |                         |           | -                    |                         | 5.714     |                 | 6.29                    |
|  |                   |               |                           |                 | '                    |                         |              |                              |                         |             |                |                         |           | '                    |                         |           |                 |                         |
| Note: Subtotals or Totals i                              | in this Exhibit   | P-5 may no    | ot be exact               | or sum exactly  | y due to rou         | unding.                 |              |                              |                         |             |                |                         |           |                      | _                       |           |                 |                         |
|  | Р                 | rior Years    | S                         |                 | FY 2016              |                         |              | FY 2017                      |                         | F۱          | 7 2018 Base    |                         | F١        | ′ 2018 O             | СО                      | F         | Y 2018 Tota     | al                      |
| Cost Elements  | Unit Cost         | Qty<br>(Each) | Total<br>Cost<br>(\$ M)   | Unit Cost       | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each)                | Total<br>Cost<br>(\$ M) | Unit Cost   |                | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)   | Total<br>Cost<br>(\$ M) |
| Hardware - D-ILS Cost                                    | ,,,,              |               | , ,                       | (, ,            |                      | (, )                    | , ,          | ( , , , ,                    | (, ,                    | (, ,        | ( /            | (, ,                    | ,,,       |                      | (, ,                    | (, ,      | ( 22 /          |                         |
| Recurring Cost   |                   |               |                           |                 |                      |                         |              |                              |                         |             |                |                         |           |                      |                         |           |                 |                         |
| D-ILS Systems Active<br>Duty <sup>(1)</sup>              | -                 | -             | -                         | 4.775           | 3                    | 14.325                  | 5.073        | 3                            | 15.220                  | -           | -              | 0.000                   | 5.376     |                      | 1 5.376                 | 5.376     | 1               | 5.37                    |
| D-ILS ANG <sup>(†)</sup>                                 | -                 | -             | -                         | -               | -                    | 0.000                   | 5.073        | 6                            | 30.438                  | -           | -              | 0.000                   | 5.376     |                      | 6 32.256                | 5.376     | 6               | 32.25                   |
| Subtotal: Recurring Cost                                 | -                 | -             | -                         | -               | -                    | 14.325                  | -            | -                            | 45.658                  | -           | -              | 0.000                   | -         | -                    | 37.632                  | -         | -               | 37.63                   |
| Subtotal: Hardware - D-ILS<br>Cost                       | -                 | -             | -                         | -               | -                    | 14.325                  | -            | -                            | 45.658                  | -           | -              | 0.000                   | -         | -                    | 37.632                  | -         | -               | 37.63                   |
| Support - D-ILS Cost                                     |                   |               | ı                         |                 |                      |                         | ı            |                              |                         |             |                |                         |           |                      | 1                       |           |                 |                         |
| Direct Mission Support/<br>Interim Contractor<br>Support | -                 | -             | -                         | -               | -                    | 0.812                   | -            | -                            | 5.887                   | -           | -              | 2.454                   | -         | -                    | 2.368                   | -         | -               | 4.82                    |
| PMA Contractor Services<br>AFLCMC (Hanscom AFB)          | -                 | -             | -                         | -               | -                    | 0.696                   | -            | -                            | 2.511                   | -           | -              | 1.584                   | -         | -                    | -                       | -         | -               | 1.58                    |
| Subtotal: Support - D-ILS<br>Cost                        | -                 | -             | -                         | -               | -                    | 1.508                   | -            | -                            | 8.398                   | -           | -              | 4.038                   | -         | -                    | 2.368                   | -         | -               | 6.40                    |
| Gross/Weapon System<br>Cost                              | -                 | -             | -                         | 5.278           | 3                    | 15.833                  | 6.006        | 9                            | 54.056                  | -           | -              | 4.038                   | 5.714     |                      | 7 40.000                | 6.291     | 7               | 44.03                   |
|  | Seco              | ondary Di     | stribution                | 1               |                      |                         | FY           | 2016                         |                         | FY 2017     |                | FY 20<br>Bas            |           |                      | FY 2018<br>OCO          |           | FY 201<br>Total |                         |
|  |                   |               |                           |                 |                      |                         |              |                              | 3                       |             | 3              |                         | (         | )                    |                         | 1         |                 |                         |
| AF   |                   | Qua           | intity                    |                 |                      |                         |              |                              |                         |             |                |                         |           |                      |                         |           |                 |                         |
| AF   |                   | -             | Intity<br>al Obligation A | Authority       |                      |                         |              | 15.833                       | 3                       |             | 22.436         |                         | 4.038     | 3                    |                         | 13.120    |                 | 17.15                   |

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| Exhibit P-5, Cost Analysis: FY 2018 Air Force |   | Date: May 2017                         |
|---|---|--|
| , , , , , , , , , , , , , , , , , , ,         | P-1 Line Item Number / Title:<br>833010 / Air Traffic Control & Landing Sys | Item Number / Title [DODIC]: - / D-ILS |

| ID Code (A=Service Ready, B=Not Service Read | y): <b>A</b>               |         | MDAP/MAIS Code | ) <b>:</b>      |                |                  |
|--|----------------------------|---------|----------------|-----------------|----------------|------------------|
| Secondar                                     | y Distribution             | FY 2016 | FY 2017        | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|  | Total Obligation Authority | 0.000   | 31.620         | 0.000           | 26.880         | 26.880           |
| AFR  | Quantity                   | -       | -              | -               | -              | -                |
|  | Total Obligation Authority | 0.000   | 0.000          | 0.000           | 0.000          | 0.000            |
| Total:                                       | Quantity                   | 3       | 9              | •               | 7              | 7                |
| Secondary Distribution                       | Total Obligation Authority | 15.833  | 54.056         | 4.038           | 40.000         | 44.038           |

<sup>(†)</sup> indicates the presence of a P-5a

### Footnotes:

<sup>(1)</sup> Firm Fixed Price (FFP) contract with production option.

| Exhibit P-5a, Procurement History and Planning: FY 2018               | Air Force   | Date: May 2017                         |
|---|---|--|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 | P-1 Line Item Number / Title:<br>833010 / Air Traffic Control & Landing Sys | Item Number / Title [DODIC]: - / D-ILS |

| Cost Elements            | 0<br>C<br>O | FY   | Contractor and Location       | Method/Type<br>or<br>Funding Vehicle | Location of PCO    | Award<br>Date | Date<br>of First<br>Delivery | <b>Qty</b><br>(Each) | Unit Cost | Specs<br>Avail<br>Now? | Date<br>Revision<br>Available | RFP Issue<br>Date |
|--------------------------|-------------|------|-------------------------------|--------------------------------------|--------------------|---------------|------------------------------|----------------------|-----------|------------------------|-------------------------------|-------------------|
| D-ILS ANG <sup>(†)</sup> |             | 2017 | Thales / Clarksburg, Maryland | SS / FFP                             | AFLCMC Hanscom AFB | Jun 2017      | Apr 2018                     | 6                    | 5.073     | Y                      |                               | Feb 2016          |
| D-ILS ANG <sup>(†)</sup> | 1           | 2018 | Thales / Clarksburg, Maryland | SS / FFP                             | AFLCMC Hanscom AFB | Dec 2017      | Nov 2018                     | 6                    | 5.376     | Υ                      |                               | Feb 2016          |

<sup>(†)</sup> indicates the presence of a P-21

| Ex   | hibi  | it P | -21, Pro             | oduct               | ion Sc                       | hedu                         | le: F       | <b>/</b> 201 | 8 Air       | Force       |             |             |             |             |               |        |             |             |             |             |             |                   |   | Date        | e: Ma    | y 201  | 7                |      |       |   |        |
|--|---|------|----------------------|---------------------|------------------------------|------------------------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|--------|-------------|-------------|-------------|-------------|-------------|-------------------|---|-------------|----------|--------|------------------|------|-------|---|--------|
|  | •   | •    | <b>ation</b> / 3 / 3 | Budg                | et Acti                      | vity /                       | Bud         | get Sı       | ub Ac       | tivity      | <b>'</b>    |             |             |             | Num<br>raffic |        |             | ₋andir      | ng Sy:      | s           |             |                   |   | Item<br>-/D |          | nber / | Title            | [DOD | )IC]: |   |        |
|  |   |      |                      | lements<br>in Each) |                              |                              |             |              |             |             |             | Fiscal Y    | ear 2017    |             |               |        |             |             |             |             |             |                   |   | Fiscal Y    | ear 2018 |        |                  |      |       |   | B<br>A |
| ACCEPT Calendar Year 2017 Calendar Year 2018 L M PRIOR BAL |   |      |                      |                     |                              |                              |             |              | L           |             |             |             |             |             |               |        |             |             |             |             |             |                   |   |             |          |        |                  |      |       |   |        |
| 0  | / <br> -<br>  | FY   | SERVICE              | PROC<br>QTY         | PRIOR<br>TO 1<br>OCT<br>2016 | BAL<br>DUE<br>AS OF<br>1 OCT | 0<br>C<br>T | N<br>O<br>V  | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U        | n<br>n | A<br>U<br>G | S<br>E<br>P | 0<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J F M A M J J A S |   |             |          |        | A<br>N<br>C<br>E |      |       |   |        |
| D-IL   | SAN   | IG   |                      |                     |                              |                              |             |              |             |             |             |             |             |             |               |        |             |             |             |             |             |                   |   |             |          |        |                  |      |       |   |        |
|  | 1 20  | 017  | AF                   | 6                   | 0                            | 6                            |             | _            |             |             |             |             |             |             | Α -           | -      | -           | -           | -           | -           | -           | -                 | - | -           | 1        | 1      | 1                | 1    | 1     | 1 | 0      |
| 1  | 1 20  | 018  | AF                   | 6                   | 0                            | 6                            |             |              |             |             |             |             |             |             |               |        |             |             |             |             | Α -         | -                 | - | -           | -        | -      | -                | -    | -     | - | 6      |
|  | V         1         2018         AF         6         0         6         0         6         0         6         0         6         0         6         0         0         N         D         J         F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A         S         O         N         D         B         A         P         A |      |                      |                     |                              |                              |             |              |             |             |             |             |             |             |               |        |             |             |             |             |             |                   |   |             |          |        |                  |      |       |   |        |

|                            |                        |             |                              |                              |             |             |             |             |             |             |             | UN          | ICLA        | 4551    | FIEL              | )           |             |             |             |             |             |             |                |             |             |             |             |             |             |
|----------------------------|------------------------|-------------|------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Exhibit P-21               | 1, Pro                 | ducti       | on Sc                        | hedul                        | le: FY      | 2018        | 3 Air       | Force       |             |             |             |             |             |         |                   |             |             |             |             |             |             | Dat         | <b>e</b> : Ma  | y 201       | 7           |             |             |             |             |
| Appropriation 3080F / 03 / |                        | udge        | et Acti                      | vity /                       | Budg        | jet Sı      | ıb Ac       | ctivity     | :           |             | _           |             |             |         | Title:<br>rol & l |             | ng Sy       | S           |             |             |             |             | n Nun<br>D-ILS | nber /      | / Title     | [DOI        | )IC]:       |             |             |
|                            | Cost Elei<br>(Units in |             |                              |                              |             |             |             |             |             | Fiscal Y    | ear 2019    | )           |             |         |                   |             |             |             |             |             |             | Fiscal '    | Year 2020      | )           |             |             |             |             | В           |
|                            |                        |             | ACCEPT                       |                              |             |             |             |             |             |             |             | (           | Calendar    | Year 20 | 19                |             |             |             | _           |             |             |             | Cale           | ndar Yea    | r 2020      |             |             |             | ] [         |
| O F C R O # FY SEI         |                        | PROC<br>QTY | PRIOR<br>TO 1<br>OCT<br>2018 | BAL<br>DUE<br>AS OF<br>1 OCT | 0<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>L  | A<br>U<br>G       | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R    | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P | N<br>C<br>E |
| D-ILS ANG                  |                        |             |                              |                              |             |             |             |             |             |             |             |             |             |         |                   |             |             |             |             | <u> </u>    |             |             |                |             |             |             |             |             |             |
| 1 2017 AF                  |                        | 6           | 6                            | 0                            |             |             |             |             |             |             |             |             |             |         |                   |             |             |             |             |             |             |             |                |             |             |             |             |             |             |
| ✓ 1 2018 AF                |                        | 6           | 0                            | 6                            | -           | 1           | -           | 1           | 1           | 1           | 1           | 1           |             |         |                   |             |             |             |             |             |             |             |                |             |             |             |             |             |             |
|                            |                        |             |                              |                              | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | U<br>L  | A<br>U<br>G       | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R    | M<br>A<br>Y | J<br>U<br>N | U<br>L      | A<br>U<br>G | S<br>E<br>P |             |
|                            |                        |             |                              |                              |             |             |             |             |             |             |             |             |             |         |                   |             |             |             |             |             |             |             |                |             |             |             |             |             |             |
|                            |                        |             |                              |                              |             |             |             |             |             |             |             |             |             |         |                   |             |             |             |             |             |             |             |                |             |             |             |             |             |             |
|                            |                        |             |                              |                              |             |             |             |             |             |             |             |             |             |         |                   |             |             |             |             |             |             |             |                |             |             |             |             |             |             |

| Exhibit P-21, Production Schedule: FY 2018 Air Force   |  | Date: May 2017               |
|--|--|------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity: | P-1 Line Item Number / Title:              | Item Number / Title [DODIC]: |
| 3080F / 03 / 3   | 833010 / Air Traffic Control & Landing Sys | - I D-ILS                    |

|          |                                  | Produ        | ction Rates (Each | / Year)      |                       |                    |                   | Procurement Le       | adtime (Months)       |                    |                   |                      |
|----------|----------------------------------|--------------|-------------------|--------------|-----------------------|--------------------|-------------------|----------------------|-----------------------|--------------------|-------------------|----------------------|
| MFR      |                                  |              |                   |              | Initial Reorder       |                    |                   |                      |                       |                    |                   |                      |
| Ref<br># |                                  | MSR For 2018 | 1-8-5 For 2018    | MAX For 2018 | ALT<br>Prior to Oct 1 | ALT<br>After Oct 1 | Manufacturing PLT | Total<br>After Oct 1 | ALT<br>Prior to Oct 1 | ALT<br>After Oct 1 | Manufacturing PLT | Total<br>After Oct 1 |
| 1        | Thales - Clarksburg,<br>Maryland | 3            | 10                | 12           | 0                     | 0                  | 0                 | 0                    | 0                     | 3                  | 11                | 14                   |

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833020 / National Airspace System

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready. B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305114F

Line Item MDAP/MAIS Code: 537

|  | Prior         |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
|--|---------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years         | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | 753.574       | 5.833            | 2.673             | 12.641           | 0.000            | 12.641         | 0.000           | 0.000         | 0.000   | 0.000   | 0.000    | 774.721 |
| Less PY Advance Procurement (\$ in Millions)   | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | 753.574       | 5.833            | 2.673             | 12.641           | 0.000            | 12.641         | 0.000           | 0.000         | 0.000   | 0.000   | 0.000    | 774.721 |
| Plus CY Advance Procurement (\$ in Millions)   | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | 753.574       | 5.833            | 2.673             | 12.641           | 0.000            | 12.641         | 0.000           | 0.000         | 0.000   | 0.000   | 0.000    | 774.721 |
| (The following                                 | Resource Sumi | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -             | -                | -                 | 0.247            | -                | 0.247          | -               | -             | -       | -       | - [      | 0.247   |
| Flyaway Unit Cost (\$ in Millions)             | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -             | -                | -                 | -                | -                | =              | -               | =             | -       | -       | -        | -       |

### **Description:**

PE 0305137F NATIONAL AIRSPACE SYSTEM (NAS)

NAS is an Acquisition Category (ACAT) IC (Component) program which entered full rate production on 15 Jun 05. It modernizes the Department of Defense (DoD) Air Traffic Control (ATC) system in concert with the Federal Aviation Administration (FAA) modernization effort. The FAA is the overall NAS program lead and the Air Force (AF) is the DoD lead. NAS increases safety of flight, provides systems and facilities interoperable with FAA modernization, replaces aging DoD ATC systems, provides identical service to military and civilian aircraft, and reduces DoD flight cancellations/delays and maintenance. Equipment procured includes ATC automation systems, surveillance radars, voice switches, military site-unique equipment (at test range facilities), associated Pre-Planned Product Improvements, site preparation, installation support, ancillary equipment and supplies, direct production support, and flight, periodic security interoperability, and information technology certifications. For the AF, this includes procurement funding for 91 DoD Advanced Automation Systems (DAASs) [45 Radar Approach Control Facilities and 46 Air Traffic Control Towers], 50 Digital Airport Surveillance Radars (DASRs), and other equipment required to interface with the FAA.

DAAS replaces the 1978 era Programmable Indicator Data Processor and is comprised of equipment tailored to support two types of ATC operations facilities: Radar Approach Control (RAPCON) and military control tower facilities. DAAS includes digital radar displays, consoles, and automation hardware and software to replace systems approaching the end of their life cycle.

DASR replaces the current generation of DoD analog ATC surveillance radars and consists of two subsystems: a primary and a secondary surveillance radar. These subsystems provide aircraft position and other data to controller displays in the RAPCON and at select control tower locations.

To date, the NAS program has procured and installed 48 DASR and 91 DAAS systems. To support increased remotely piloted aircraft operations, there are two additional DASRs remaining to be procured and installed: one funded with FY15 funds (approved in FY16 Omnibus Above Threshold request) at Nellis AFB and one funded in FY18 for Creech AFB. The NAS FOC will occur in FY20 with installation of the Creech DASR. NAS is also transitioning to the operations and support phase which will focus on mitigation of DAAS/DASR diminishing manufacturing source (DMS) and sustainment issues. Funds for NAS sustainment modifications are being programmed in the Communications Electronics Modification P-1 Line #49 under the NAS program element 0305137F.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities. Reserve component allocations are subject to Total Force priorities and demand.

UNCLASSIFIED
Page 1 of 10

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833020 / National Airspace System

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305114F

Line Item MDAP/MAIS Code: 537

PE 0305114F AIR TRAFFIC CONTROL AND LANDING SYSTEMS (ATCALS)

ATCALS procures and supports fixed-base and tactical radar, navigation aids, voice communications, and data processing/automation capabilities. ATCALS enables Air Force (AF) air traffic controllers to provide advisory, sequencing, separation, and landing guidance services to all aircraft in AF-assigned airspace. NAS support in the ATALS PE 0305114F currently includes procurement of one DAAS for the ATCALS/DAAS Operational Support Facility (OSF) at the Air Force Flight Standards Agency in Oklahoma City, OK.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities. Reserve component allocations are subject to Total Force priorities and demand.

Funding for this exhibit is contained in PE 0305137F and PE 0305114F.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 1       | 0       | 1               | 0              | 1                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 5.833   | 2.673   | 12.641          | 0.000          | 12.641           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG                   | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 1       | 0       | 1               | 0              | 1                | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 5.833   | 2.673   | 12.641          | 0.000          | 12.641           | 0.000   | 0.000   | 0.000   | 0.000   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833020 / National Airspace System

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305114F

Line Item MDAP/MAIS Code: 537

|                 | Exhibits Schedule  |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Air Traffic Control, Approach, and Landing System (ATCALS) |             |          |                       | - / -                                    | - / 3.628                                | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-5             | National Airspace System (NAS) Plan                        | P-5a, P-21  | Α        |                       | 140 / 753.574                            | - /2.205                                 | - / 2.673                                | 1 / 12.641                               | - / 0.000                                | 1 / 12.641                               |
| P-40            | Total Gross/Weapon System Cost                             |             |          |                       | - / 753.574                              | - / 5.833                                | - / 2.673                                | - / 12.641                               | - / 0.000                                | - / 12.641                               |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

PE 0305137F NATIONAL AIRSPACE SYSTEM (NAS):

FY18: Funds procure and commission one DASR for Creech AFB.

PE 0305114F Air Traffic Control and Landing Systems (ATCALS):

ATCALS/DAAS OSF EQIPMENT: No FY18 funds are requested.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

P-1 Line Item Number / Title:

3080F / 03 / 3

833020 / National Airspace System

Aggregated Items Title:

**Date:** May 2017

Air Traffic Control, Approach, and

Landing System (ATCALS)

|   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           | anding C      | ystein (                | AICALS    | ')            |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | F         | Y 2018 OC     | 0                       | FY        | / 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]          | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| NAS Capital Equipment F                 | Replac   | cement                |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| ATCALS/NAS Equip                        | A        |                       | -         | -             | -                       | 3.628     | 1             | 3.628                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Secondary Distribution                  |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                                      |          |                       |           | -             | -                       |           | 1             | 3.628                   |           | -             | 0.000                   |           | -             | 0.000                   |           | -             | 0.000                   |           | -             | 0.000                   |
| Subtotal: NAS Capital Eq<br>Replacement | uipm     | ent                   | -         | -             | -                       | -         | -             | 3.628                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |           | -             | 0.000                   |
| Total                                   |          |                       | -         | -             | -                       | -         | -             | 3.628                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

#### Footnotes:

<sup>(1)</sup> Option to the Federal Aviation Administration Standard Terminal Automated Replacement System contract (also known as DAAS).

Exhibit P-5, Cost Analysis: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>833020 / National Airspace SystemItem Number / Title [DODIC]:<br/>- / National Airspace System (NAS) Plan

| ID Code (A=Service Ready, B=Not Service Ready) : A       |                             | M                         | DAP/MAIS Code:            |              |             |               |
|--|-----------------------------|---------------------------|---------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                   | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | 140                         | -                         | -                         | 1            | -           | 1             |
| Gross/Weapon System Cost (\$ in Millions)                | 753.574                     | 2.205                     | 2.673                     | 12.641       | 0.000       | 12.641        |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | 753.574                     | 2.205                     | 2.673                     | 12.641       | 0.000       | 12.641        |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)              | 753.574                     | 2.205                     | 2.673                     | 12.641       | 0.000       | 12.641        |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget request | s are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | 0.000                       | 0.000                     | 0.000                     | 0.247        | 0.000       | 0.247         |
| Gross/Weapon System Unit Cost (\$ in Millions)           | 5.383                       | -                         | -                         | 12.641       | -           | 12.641        |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | F         | Prior Years   | ;                       |           | FY 2016       |                         |           | FY 2017       |                         | F۱        | / 2018 Ba     | se                      | F         | / 2018 OC     | :0                      | F         | / 2018 Tot    | al                      |
|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements  | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - NAS Cost  |           | ·             |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Recurring Cost   |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| DAAS/DASR <sup>(†)</sup>                                       | 4.806     | 140           | 672.771                 | -         | -             | 0.000                   | -         | -             | 0.000                   | 12.121    | 1             | 12.121                  | -         | -             | -                       | 12.121    | 1             | 12.1                    |
| Subtotal: Recurring Cost                                       | -         | -             | 672.771                 | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 12.121                  | -         | -             | -                       | -         | -             | 12.1                    |
| Subtotal: Hardware - NAS<br>Cost                               | -         | -             | 672.771                 | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 12.121                  | -         | -             | -                       | -         | -             | 12.1                    |
| Logistics - Logistics End Item                                 | Cost      |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Recurring Cost   |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| DASR Site Activation   | -         | -             | 49.437                  | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.220                   | -         | -             | -                       | -         | -             | 0.2                     |
| Subtotal: Recurring Cost                                       | -         | -             | 49.437                  | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.220                   | -         | -             | -                       | -         | -             | 0.2                     |
| Subtotal: Logistics -<br>Logistics End Item Cost               | -         | -             | 49.437                  | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.220                   | -         | -             | -                       | -         | -             | 0.2                     |
| Support - Support End Item C                                   | Cost      |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Program Management<br>Administration Contractor<br>Services    | -         | -             | 25.053                  | -         | -             | 2.123                   | -         | -             | 2.588                   | -         | -             | 0.150                   | -         | -             | 0.000                   | -         | -             | 0.1                     |
| Program Management<br>Administration Other<br>Government Costs | -         | -             | 6.313                   | -         | -             | 0.082                   | -         | -             | 0.085                   | -         | -             | 0.150                   | -         | -             | -                       | -         | -             | 0.1                     |
| Subtotal: Support - Support<br>End Item Cost                   | -         | -             | 31.366                  | -         | -             | 2.205                   | -         | -             | 2.673                   | -         | -             | 0.300                   | -         | -             | 0.000                   | -         | -             | 0.3                     |
| Gross/Weapon System Cost                                       | 5.383     | 140           | 753.574                 | -         | -             | 2.205                   | -         | -             | 2.673                   | 12.641    | 1             | 12.641                  | -         | -             | 0.000                   | 12.641    | 1             | 12.6                    |

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| Exhibit P-5, Cost Analysis: FY 2018 Air Force | Date: May 2017   |
|---|--|
|   | Item Number / Title [DODIC]: - / National Airspace System (NAS) Plan |

| ID Code (A=Service Ready, B=Not Service R | eady):A                    |         | MDAP/MAIS Code | <b>)</b> :      |                |                  |
|---|----------------------------|---------|----------------|-----------------|----------------|------------------|
| Second                                    | ary Distribution           | FY 2016 | FY 2017        | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
| AF  | Quantity                   | 0       | 0              | 1               | 0              | 1                |
|   | Total Obligation Authority | 2.205   | 2.673          | 12.641          | 0.000          | 12.641           |
| Total:                                    | Quantity                   | -       | =              | 1               | =              | 1                |
| Secondary Distribution                    | Total Obligation Authority | 2.205   | 2.673          | 12.641          | 0.000          | 12.641           |

<sup>(†)</sup> indicates the presence of a P-5a

| Exhibit P-5a, Procurement History and Planning: FY 2018               | Air Force  | Date: May 2017   |
|---|--|--|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 | P-1 Line Item Number / Title:<br>833020 / National Airspace System | Item Number / Title [DODIC]: - / National Airspace System (NAS) Plan |
|   | <u> </u>   | <u> </u>   |

| Cost Elements            | 0<br>C<br>O | FY   | Contractor and Location | Method/Type<br>or<br>Funding Vehicle | Location of PCO    | Award<br>Date | Date<br>of First<br>Delivery | Qty<br>(Each) | Unit Cost | Specs<br>Avail<br>Now? | Date<br>Revision<br>Available | RFP Issue<br>Date |
|--------------------------|-------------|------|-------------------------|--------------------------------------|--------------------|---------------|------------------------------|---------------|-----------|------------------------|-------------------------------|-------------------|
| DAAS/DASR <sup>(†)</sup> |             | 2015 | Raytheon / Marlboro, MA | C / FFP                              | AFLCMC Hanscom AFB | Aug 2017      | Jul 2019                     | 1             | 12.121    | Y                      |                               | Nov 2016          |
| DAAS/DASR <sup>(†)</sup> |             | 2018 | Raytheon / Marlboro, MA | C/FFP                                | AFLCMC Hanscom AFB | Mar 2018      | Feb 2020                     | 1             | 12.121    | Y                      |                               | Jul 2017          |

<sup>(†)</sup> indicates the presence of a P-21

|  |                              |                              |             |             |             |             |             |             |             | O.          | I O L A | 1001        |                 | ,           |             |             |             |             |             |                    |               |             |        |        |                |             |             |
|--|------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|---------------|-------------|--------|--------|----------------|-------------|-------------|
| Exhibit P-21, Product                  | ion Sc                       | hedu                         | le: F۱      | Y 201       | 8 Air I     | orce        |             |             |             |             |         |             |                 |             |             |             |             |             |             | Date               | : Ma          | y 201       | 7      |        |                |             |             |
| Appropriation / Budg<br>3080F / 03 / 3 | et Acti                      | vity /                       | Budç        | get S       | ub Ac       | tivity      | :           | 1           |             |             |         |             | Title:<br>ce Sy |             |             |             |             |             |             |                    | Num<br>ationa |             |        |        | DIC]:<br>em (N | AS) I       | Plar        |
| Cost Elements<br>(Units in Each)       |                              |                              |             |             |             |             |             | Fiscal \    | rear 2017   |             |         |             |                 |             |             |             |             |             |             | Fiscal Y           | ear 2018      |             |        |        |                |             | В           |
|  | ACCEPT                       |                              |             |             | _           |             |             |             |             |             | alendar | Year 20     | 17              |             |             |             |             |             |             | Calendar Year 2018 |               |             |        |        | ] [            |             |             |
| O F C R PROC O # FY SERVICE QTY        | PRIOR<br>TO 1<br>OCT<br>2016 | BAL<br>DUE<br>AS OF<br>1 OCT | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | N<br>U  | J<br>U<br>L | A<br>U<br>G     | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R        | A<br>P<br>R   | M<br>A<br>Y | J<br>U | J<br>U | A<br>U<br>G    | S<br>E<br>P | N<br>C<br>E |
| DAAS/DASR                              |                              |                              |             |             | <u>'</u>    |             |             |             | <u>'</u>    |             |         |             |                 |             |             |             |             |             |             |                    |               |             |        |        |                |             |             |
| Prior Years Deliveries: 139            |                              |                              |             |             |             |             |             |             |             |             |         |             |                 |             |             |             |             |             |             |                    |               |             |        |        |                |             |             |
| 1 2015 AF 1                            | 0                            | 1                            |             |             |             |             |             |             |             |             |         |             | Α -             | -           | -           | -           | -           | -           | -           | -                  | -             | -           | -      | -      | -              | -           |             |
| 1 2018 AF 1                            | 0                            | 1                            |             |             |             |             |             |             |             |             |         |             |                 |             |             |             | ,           |             |             | Α -                | -             | -           | -      | -      | -              | -           |             |
|  |                              |                              | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | N<br>N  | J<br>L      | A<br>U<br>G     | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R        | A<br>P<br>R   | M<br>A<br>Y | N<br>N | J<br>U | A<br>U<br>G    | S<br>E<br>P |             |
|  |                              |                              |             |             |             |             |             |             |             |             |         |             |                 |             |             |             |             |             |             |                    |               |             |        |        |                |             |             |

|               | ACCEPT<br>PRIOR | ity / l               | Budg               | et Su                     | ıb Ac                        | tivity                           |             | 833         | <b>Line</b><br>3020 / |             |             |        | Title:           |                  |                  |                  |                  |                  |                  |  |  | ber /  |                  |   |                 |   |
|---------------|-----------------|-----------------------|--------------------|---------------------------|------------------------------|----------------------------------|-------------|-------------|-----------------------|-------------|-------------|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|--|--|------------------|---|-----------------|---|
| ts in Each)   | PRIOR           | BAI                   |                    |                           |                              |                                  |             |             |                       | ,           |             | •      |                  | Stelli           |                  |                  |                  |                  |                  | - / N  | ationa   | al Airs  | pace             | Syste   | m (N            | 4S) P   |
|               | PRIOR           | BAI                   |                    |                           |                              |                                  |             | Fiscal Y    | ear 2019              | )           |             |        |                  |                  |                  |                  |                  |                  |                  | Fiscal Ye  | ear 2020   |  |                  |   |                 |   |
|               |                 | BAI I                 | Calendar Year 2019 |                           |                              |                                  |             |             |                       | Calen       | dar Year    | 2020   |                  |                  |                  |                  |                  |                  |                  |  |  |  |                  |   |                 |   |
| PROC<br>E QTY | OCT /           | DUE<br>AS OF<br>1 OCT | O<br>C<br>T        | N<br>O<br>V               | D<br>E<br>C                  | J<br>A<br>N                      | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R           | M<br>A<br>Y | N<br>N      | n<br>n | O U >            | S<br>E<br>P      | 0<br>C<br>T      | N<br>O<br>V      | D<br>E<br>C      | J<br>A<br>N      | F<br>E<br>B      | M<br>A<br>R  | A<br>P<br>R  | M<br>A<br>Y  | N N C            | n<br>n  | A<br>U<br>G     | S<br>E<br>P   |
|               |                 |                       |                    |                           |                              |                                  |             |             |                       |             |             |        |                  |                  |                  |                  |                  |                  |                  |  |  |  |                  |   |                 |   |
| 39            |                 |                       |                    |                           |                              |                                  |             |             |                       |             |             |        |                  |                  |                  |                  |                  |                  |                  |  |  |  |                  |   |                 |   |
| 1             | 0               | 1                     | -                  | -                         | -                            | -                                | -           | -           | -                     | -           | -           | 1      |                  |                  |                  |                  |                  |                  |                  |  |  |  |                  |   |                 |   |
| 1             | 0               | 1                     | -                  | -                         | -                            | -                                | -           | -           | -                     | -           | -           | -      | -                | -                | -                | -                | -                | -                | 1                |  |  |  |                  |   |                 |   |
|               |                 |                       | O<br>C<br>T        | N<br>O<br>V               | D<br>E<br>C                  | J<br>A<br>N                      | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R           | M<br>A<br>Y | J<br>U<br>N | J<br>L | A U G            | S<br>E<br>P      | O<br>C<br>T      | N<br>O<br>V      | D<br>E<br>C      | J<br>A<br>N      | F<br>E<br>B      | M<br>A<br>R  | A<br>P<br>R  | M<br>A<br>Y  | N n c            | J<br>U  | A<br>U<br>G     | S<br>E<br>P   |
|               | 39 1 1          | 1 0                   | 1 0 1              | 1 0 1 -<br>1 0 1 -<br>0 0 | 1 0 1<br>1 0 1<br>0 N<br>C O | 1 0 1<br>1 0 1<br>0 N D<br>C O E | 1 0 1       | 1 0 1       | 1 0 1                 | 1 0 1       | 1 0 1       | 1 0 1  | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 1<br>0 N D J F M A M J J A S O N D J F<br>C O E A E A P A U U U E C O E A E | 1 0 1 1<br>1 0 1 1<br>0 N D J F M A M J J A S O N D J F M<br>C O E A E A P A U U U E C O E A E A | 1 0 1 1<br>1 0 1 1<br>0 N D J F M A M J J A S O N D J F M A<br>C O E A E A P A U U U U E C O E A E A P | 1 0 1 1<br>1 0 1 | 1 0 1 1<br>1 0 1 1<br>0 N D J F M A M J J A S O N D J F M A M J C O E A E A P A U | 1 0 1 1 1 1 0 1 | 1 0 1 1<br>1 0 1 1<br>0 N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A A D U U U U E C O E A E A P A U U U U |

| Exhibit P-21, Production Schedule: FY 2018 Air Force   |                                   | Date: May 2017                          |
|--|-----------------------------------|---|
| Appropriation / Budget Activity / Budget Sub Activity: | P-1 Line Item Number / Title:     | Item Number / Title [DODIC]:            |
| 3080F / 03 / 3   | 833020 / National Airspace System | - / National Airspace System (NAS) Plan |

|          |                                 | Produc       | ction Rates (Each | / Year)      |                       |                    |                   | Procurement Lea      | adtime (Months)       |                    |                   |                      |
|----------|---------------------------------|--------------|-------------------|--------------|-----------------------|--------------------|-------------------|----------------------|-----------------------|--------------------|-------------------|----------------------|
| MFR      |                                 |              |                   | ,            |                       | Init               | tial              |                      |                       | Reo                | rder              |                      |
| Ref<br># | Manufacturer<br>Name - Location | MSR For 2018 | 1-8-5 For 2018    | MAX For 2018 | ALT<br>Prior to Oct 1 | ALT<br>After Oct 1 | Manufacturing PLT | Total<br>After Oct 1 | ALT<br>Prior to Oct 1 | ALT<br>After Oct 1 | Manufacturing PLT | Total<br>After Oct 1 |
| 1        | Raytheon - Marlboro, MA         | 1            | 4                 | 4            | 0                     | 0                  | 0                 | 0                    | 0                     | 6                  | 23                | 29                   |

#### Remarks:

NAS is an ACAT IC program. The Air Force is the lead Service. With the exception of the AF DASRs for Nellis AFB and Creech AFB, DAAS and DASR equipment deliveries and installation funded under the NAS PE0305137A/F/N are complete. Total number of systems are:

AF - 91 DAASs and 50 DASRs

Army - 24 DAASs and 12 DASRs

Navy - 47 DAASs and 29 DASRs. Note: Funding for last 3 DAAS procurements and 4 installations and support costs for FY17/beyond have been realigned to Ashore ATC Equipment (BLI 2820).

"A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833030 / Battle Control System - Fixed

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0102326F

Other Related Program Elements: 0102326F

Line Item MDAP/MAIS Code: N/A

| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base   | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total  |
|--|----------------|------------------|-------------------|-------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|--------|
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                 | -                | -                | -               | -              | -       | -       | -              | -      |
| Gross/Weapon System Cost (\$ in Millions)      | 2.704          | 2.018            | 5.677             | 6.415             | 0.000            | 6.415            | 3.033           | 3.086          | 3.142   | 3.199   | -              | 29.274 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                 | -                | -                | -               | -              | -       | -       | -              | -      |
| Net Procurement (P-1) (\$ in Millions)         | 2.704          | 2.018            | 5.677             | 6.415             | 0.000            | 6.415            | 3.033           | 3.086          | 3.142   | 3.199   | -              | 29.274 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                 | -                | -                | -               | -              | -       | -       | -              | -      |
| Total Obligation Authority (\$ in Millions)    | 2.704          | 2.018            | 5.677             | 6.415             | 0.000            | 6.415            | 3.033           | 3.086          | 3.142   | 3.199   | -              | 29.274 |
| (The following                                 | Resource Sumi  | mary rows are fo | r informational p | ourposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |         |         |                |        |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                 | -                | -                | -               | -              | -       | -       | -              | _      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                 | -                | -                | -               | -              | -       | -       | -              | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | =                 | -                 | -                | -                | -               | -              | -       | -       | -              | -      |

### **Description:**

BCS-F supports the North American Aerospace Defense Command/ Northern Command (NORAD/NORTHCOM) homeland defense and air sovereignty mission for fixed Air Defense Sectors.

BATTLE CONTROL SYSTEM-FIXED (BCS-F): BCS-F is a Bi-national program with Canada. The BCS-F Program is an AF Homeland Defense battle management command and control system with the capability to integrate data from existing and future civil and military defense surveillance systems into a comprehensive air picture. BCS-F provides tactical communications and data link capabilities with other military and civil systems responsible for planning, directing, coordinating and controlling forces for air surveillance, air defense, and control of sovereign US air space. This integrated air picture enhances the capability to conduct peacetime air sovereignty operations and transition to active air defense operations in the event of aggression. The BCS-F baseline expanded in FY2014 to include the Remote Tactical Air Picture/Remote Work Station (RTAP/RWS). Tech refresh will be required, to prevent system obsolescence, account for new cyber-security requirements and will posture the program to seamlessly integrate future capabilities.

NATIONAL CAPITOL REGION - INTEGRATED AIR DEFENSE SYSTEM (NCR-IADS): NCR-IADS is a post-September 11, 2001 rapidly fielded capability that improves low altitude detection capability in order to prosecute airborne threats to the NCR. NCR-IADS provides ground-based air defense of the National Capitol Region airspace, and provides an integrated air picture, ground air defense weapons, enhanced regional situational awareness and forensic data collection capabilities for the war-fighter mission to protect the NCR. Tech refresh will be required, to prevent system obsolescence, account for new cybersecurity requirements and will posture the program to seamlessly integrate future capabilities.

BATTLE CONTROL SYSTEM MODIFICATION: Provides for capital equipment replacement activities at the fixed Air Defense Sector under the modification efforts for Release 3.2.4 and beyond, which include, but are not limited to: infrastructure upgrades, future Diminishing Manufacturing Sources (DMS), and replacement of other equipment that does not qualify for Centralized Asset Management (CAM) funding. Tech refresh will be required, to prevent system obsolescence, account for new cyber-security requirements and will posture the program to seamlessly integrate future capabilities.

#### Justification:

- Battle Control System-Fixed (BCS-F) INC 3 program ended after reaching full deployment in November 2012: No FY2018 funds requested.
- National Capitol Region Integrated Air Defense System (NCR-IADS): Tech refresh will be required to prevent system obsolescence, account for new cyber- security requirements and will posture the program to seamlessly integrate future capabilities.

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|---|--|---|--|
| Exhibit P-40, Budget Line Item Justification: FY  | 2018 Air Force   |   | <b>Date</b> : May 2017   |
| Appropriation / Budget Activity / Budget Sub Ac<br>3080F: Other Procurement, Air Force / BA 03: Elec<br>Equip / BSA 3: Electronics Programs   |  | P-1 Line Item Nun<br>833030 / Battle Co                 | mber / Title:<br>ontrol System - Fixed   |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It   | ems: 0102326F   | Other Related Program Elements: 0102326F   |
| Line Item MDAP/MAIS Code: N/A   |  |   |  |
| - BATTLE CONTROL SYSTEM MODIFICATION UPGRADES:<br>Centralized Asset Management (CAM) funding, to include, but<br>maintain Authority to Operate (ATO).<br>- PROGRAM MANAGEMENT ADMINISTRATION (PMA): FY2 | not limited to: updated configurations of ex<br>018 funds for PMA costs provide the mana | isting sites to match the grant gement, engineering and | ds will also provide hardware upgrades and spares that do not qualify for modified baseline, and hardware for increased cyber security capability to d technical support for the program office.  mal, life of type buys or bridge buys limited to the program of record quantity. |
|   |  |   |  |
|   |  |   |  |
|   |  |   |  |
|   |  |   |  |
|   |  |   |  |
|   |  |   |  |

LI 833030 - Battle Control System - Fixed Air Force

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833040 / Theater Air Control Sys Improvements

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0207412F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |        |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|--------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 22.710           | 1.163             | 23.233           | 4.970            | 28.203         | 20.131          | 2.901          | 2.951   | 7.216   | -        | 85.275 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | -            | 22.710           | 1.163             | 23.233           | 4.970            | 28.203         | 20.131          | 2.901          | 2.951   | 7.216   | -        | 85.275 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | -            | 22.710           | 1.163             | 23.233           | 4.970            | 28.203         | 20.131          | 2.901          | 2.951   | 7.216   | -        | 85.275 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) |         |         |          |        |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |

### **Description:**

PE 0207412F CONTROL AND REPORTING CENTER (CRC)

The Control and Reporting Center (CRC) is a mobile, ground-based theater air control system (TACS) surveillance and battle management command and control (BMC2) element. It consists of facilities, equipment, and people. It is a customizable, modular, transportable, and persistent weapon system employed at the tactical level to support air and surface operations. The CRC is a family of systems which includes: AN/TYQ-23(V)1 Operations Module (OM) (to be replaced by the AN/TYQ-23v5), a low density/high demand (LD/HD), rapidly deployable, ground-based C2 asset that features an automated, computer-based information system to provide operators with a real-time battle space picture necessary to plan, direct, and control tactical air operations and airspace management tasks; AN/TSC-147 Joint Tactical Information Distribution System (JTIDS) Module (JM) (to be replaced by the Link 16 Upgrade using the Multifunctional Information Distribution System Joint Tactical Radio System (MIDS JTRS)); AN/TRC-213/214 Remote Radio Secure Voice System (RRSVS); and the AN/TPS-75 Radar, CRC's organic radar, (to be replaced by the Three-Dimensional Expeditionary Long Range Radar (3DELRR) (PE 0207455)). Funding may be used to address Diminishing Manufacturing Sources and Material Shortages (DMSMS) issues.

In order to meet warfighter requirements, incremental updates are required. Phase 1 capabilities include, but are not limited to: JM Link 16 Upgrade kits and DMSMS updates (JM Link 16 Upgrade will provide for crypto modernization and will meet FAA mandated frequency re-mapping requirements, as well as stand up organic software and hardware support); Secret Internet Protocol Router Network (SIPRnet) connectivity in order to fulfill mission requirements; and a Cross Domain Solution (CDS) to update cyber security. Fielding and DMSMS updates and interim contract support will continue through FY21.

Funding for this exhibit contained in PE 0207412F.

|        | Secondary Distribution     | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|--------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF     | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|        | Total Obligation Authority | 8.899   | 1.163   | 13.685          | 4.970          | 18.655           | 8.575   | 3.801   | 3.261   | 7.216   |
| AFNG   | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|        | Total Obligation Authority | 13.811  | 0.000   | 9.548           | -              | 9.548            | 9.856   | 1.200   | 1.400   | -       |
| Total: | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |

LI 833040 - Theater Air Control Sys Improvements Air Force

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P-1 Line #19

Volume 1 - 133

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833040 / Theater Air Control Sys Improvements

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0207412F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                        |                            |         |         | FY 2018 | FY 2018 | FY 2018 |         |         |         |         |
|------------------------|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Secondary              | y Distribution             | FY 2016 | FY 2017 | Base    | oco     | Total   | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
| Secondary Distribution | Total Obligation Authority | 22.710  | 1.163   | 23.233  | 4.970   | 28.203  | 18.431  | 5.001   | 4.661   | 7.216   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833040 / Theater Air Control Sys Improvements

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0207412F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule              |                           | ,        |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|---------------------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits               | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | TACSI Mods                     |                           |          |                       | - / 0.000                                | - / 22.710                               | - / 1.163                                | - / 4.450                                | - / 0.000                                | - / 4.450                                |
| P-3a            | 1 / CRC Phase 1 (Other)        |                           |          |                       | - / -                                    | - / 0.000                                | - / 0.000                                | - / 18.783                               | - / 4.970                                | - / 23.753                               |
| P-40            | Total Gross/Weapon System Cost |                           | - 1 -    | - / 22.710            | - / 1.163                                | - / 23.233                               | - / 4.970                                | - / 28.203                               |  |  |
|                 | Exhibite Schodula              | Exhibits Schedule FY 2019 |          |                       | FY 2020                                  | FY 2021                                  | FY 2022                                  | To Complete                              | Total                                    |  |
|                 | Exhibits Schedule              |                           |          |                       | F1 2019                                  | F1 2020                                  | F1 2021                                  | F1 2022                                  | 10 Complete                              | Total                                    |
| Exhibit<br>Type | Title*                         | Subexhibits               | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost (Each) / (\$ M)    | Quantity / Total Cost (Each) / (\$ M)    | Quantity / Total Cost (Each) / (\$ M)    | Quantity / Total Cost (Each) / (\$ M)    | Quantity / Total Cost (Each) I (\$ M)    | Quantity / Total Cost (Each) / (\$ M)    |
|                 |                                | Subexhibits               | 1        | MAIS                  | Quantity / Total Cost                    |
| Туре            | Title*                         | Subexhibits               | 1        | MAIS                  | Quantity / Total Cost<br>(Each) / (\$ M) |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 funding supports:

- a. Operations Module (OM) MOD & PHASE 1 capabilities include, but are not limited to, the following: OM Mod installations, Interim Contractor Support (ICS), Diminishing Manufacturing Sources and Material Shortages (DMSMS) support, Cross Domain Solution (CDS), Joint Tactical Information Distribution System Module (JM) Link 16 Upgrade Production Kits, and Secret Internet Protocol Router Network (SIPRnet).
- b. SUPPORT: (OM Mod & Phase1) Includes efforts, but are limited to, Software Integrated Laboratory (SIL) activation, and Program Management Administration (PMA) activities in support of the Control and Reporting Center (CRC).

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:
833040 / Theater Air Control Sys Improvements

TACSI Mods

|                              |   |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | FY        | 7 2018 OC     | 0                       | FY        | / 2018 Tot    | al                      |
|------------------------------|---|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title          | ID  | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| TYQ23A / AN/TYQ23A<br>OM MOD |   |                       | -         | -             | -                       | -         | -             | 22.710                  | -         |               | 1.163                   | -         | -             | 4.450                   | -         | -             | -                       | -         | -             | 4.450                   |
| Secondary Distribution       |   |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                           |   |                       |           | -             | -                       |           | -             | 8.899                   |           | -             | 1.163                   |           | -             | 4.450                   |           | -             | -                       |           | -             | 4.450                   |
| AFNG                         |   |                       |           | -             | -                       |           | -             | 13.811                  |           | -             | 0.000                   |           | -             | 0.000                   |           | -             | -                       |           | -             | 0.000                   |
| Total                        |   |                       | -         | -             | 0.000                   | -         | -             | 22.710                  | -         | -             | 1.163                   | -         | -             | 4.450                   | -         | -             | 0.000                   | -         | -             | 4.450                   |
| Makai Culakakala an Tak      | that the second |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### **Modification Information:**

| Item Number / Title       | Models of Systems Affected | Modification Type |
|---------------------------|----------------------------|-------------------|
| TYQ23A / AN/TYQ23A OM MOD | OMMOD                      | Other             |

Exhibit P-3a, Individual Modification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 3

P-1 Line Item Number / Title:
833040 / Theater Air Control Sys Improvements

Date: May 2017

Modification Number / Title:
1 / CRC Phase 1

| ID Code (A=Service Ready, B=Not Service Ready) | :              |                  |                    |                  |                  | MDAP/MA          | S Code:         |                |         |         |                |       |
|--|----------------|------------------|--------------------|------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|-------|
| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017            | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 0.000            | 0.000              | 18.783           | 4.970            | 23.753           | -               | -              | -       | -       | -              | -     |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Net Procurement (P-1) (\$ in Millions)         | -              | 0.000            | 0.000              | 18.783           | 4.970            | 23.753           | -               | -              | -       | -       | -              | -     |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Total Obligation Authority (\$ in Millions)    | -              | 0.000            | 0.000              | 18.783           | 4.970            | 23.753           | -               | -              | -       | -       | -              | -     |
| (The following                                 | Resource Sum   | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) | i       |         |                |       |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |

# **Description:**

PE 0207412F CONTROL AND REPORTING CENTER (CRC) CRC Phase 1

In order to meet warfighter requirements, incremental updates are required. Phase 1 capabilities include, but are not limited to: JM Link 16 Upgrade kits and DMSMS updates (JM Link 16 Upgrade will provide for crypto modernization and will meet FAA mandated frequency re-mapping requirements, as well as stand up organic software and hardware support); Secret Internet Protocol Router Network (SIPRnet) connectivity in order to fulfill mission requirements; and a Cross Domain Solution (CDS) to update cyber security. Fielding and DMSMS updates and interim contract support will continue through FY22.

Milestone/Development Status

N/A

| Second                 | dary Distribution          | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | -       | 9.235           | 4.970          | 14.205           | -       | -       | -       | -       |
| AFNG                   | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | -       | 9.548           | -              | 9.548            | -       | -       | -       | -       |
| Total:                 | Quantity                   | -       | -       | -               | -              | -                | =       | -       | -       | -       |
| Secondary Distribution | Total Obligation Authority | 0.000   | 0.000   | 18.783          | 4.970          | 23.753           | -       | -       | -       | -       |

| Exhibit P-3a, Individual Modification: FY 2018 Air Force |   | Date: May 2017                               |
|--|---|--|
|  |   | Modification Number / Title: 1 / CRC Phase 1 |
| 3000F 1 03 1 3   | 833040 / Theater Air Control Sys Improvements | I / CRC Fliase I                             |

| 3080F / 03 / 3                                    |                                   |                                   | 833040 / 7                        | Γheater Air                       | Control Sy                        | s Improver                        | ments                             |                                   | 1 / CRC P                         | hase 1                            |                                   |                                  |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| ID Code (A=Service Ready, B=Not Service Ready):   |                                   |                                   |                                   |                                   | MD                                | AP/MAIS Co                        | ode:                              |                                   |                                   |                                   |                                   |                                  |
| Models of Systems Affected: CRCPha                | ase1                              | Modifi                            | cation Typ                        | e: Other                          | ,                                 |                                   | Re                                | lated RDT                         | &E PEs:                           |                                   |                                   |                                  |
|   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                            |
| Financial Plan                                    | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M |
| Procurement                                       |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Modification Item 1 of 1: CRC Phase 1             |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| B Kits  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Recurring   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| CRC Phase 1:EQUIPMENT Group B (Active)            | - 1 -                             | - / -                             | - / -                             | 9 / 7.336                         | - 1 -                             | 9 / 7.336                         | - 1 -                             | - / -                             | - 1 -                             | - / -                             | - / -                             | - 1 -                            |
| CRC Phase 1:EQUIPMENT Group B (Guard)             | - 1 -                             | - 1 -                             | - 1 -                             | 12 / 9.548                        | - 1 -                             | 12 / 9.548                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Recurring                               | - / -                             | - / -                             | - / -                             | - /16.884                         | - / -                             | - /16.884                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: CRC Phase 1                             | - / -                             | - / -                             | - / -                             | - /16.884                         | - / -                             | - /16.884                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: Procurement, All Modification Items     | - / -                             | - / -                             | - / -                             | - /16.884                         | - / -                             | - /16.884                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Support (All Modification Items)                  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Type 1 Training                                   | - 1 -                             | - 1 -                             | - 1 -                             | - /1.899                          | - 1 -                             | - /1.899                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| OCO INSTALLATIONS                                 | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - /4.970                          | - /4.970                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Support                                 | - / -                             | - / -                             | - / -                             | - /1.899                          | - /4.970                          | - /6.869                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Installation                                      |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Subtotal: Installation                            | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Total   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Total Cost (Procurement + Support + Installation) | -                                 | 0.000                             | 0.000                             | 18.783                            | 4.970                             | 23.753                            | -                                 | -                                 | _                                 | -                                 | -                                 | -                                |

Exhibit P-3a, Individual Modification: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 3080F / 03 / 3 833040 / Theater Air Control Sys Improvements 1 / CRC Phase 1 MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): Modification Item 1 of 1: CRC Phase 1 Manufacturer Information Manufacturer Name: Solypsis Manufacturer Location: Baltimore, MD Administrative Leadtime (in Months): 3 Production Leadtime (in Months): 21 **Dates** FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 **Contract Dates** Jan 2018

Oct 2019

#### Installation Information

Method of Implementation: Contract Field Team

# Installation Schedule

**Delivery Dates** 

| เมรเล | iauon | Scrieu | uie  |      |    |    |      |      |    |    |      |      |    |    |      |      |    |    |      |      |    |    |      |     |    |    |      |      |    |    |     |
|-------|-------|--------|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|-----|----|----|------|------|----|----|-----|
|       |       |        | FY 2 | 2016 |    |    | FY 2 | 2017 |    |    | FY 2 | 2018 |    |    | FY 2 | 2019 |    |    | FY 2 | 2020 |    |    | FY 2 | 021 |    |    | FY 2 | 2022 |    |    |     |
|       | PYS   | Q1     | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3  | Q4 | Q1 | Q2   | Q3   | Q4 | TC | Tot |
| In    | 0     | -      | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | 8  | 8    | 5    | -  | 5  | 6    | 6   | -  | -  | -    | -    | -  | 0  | 38  |
| Out   | 0     | -      | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | 8  | 8    | 5    | -  | 5  | 6    | 6   | -  | -  | -    | -    | -  | 0  | 38  |



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833070 / Weather Observation Forecast

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready. B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305111F

Line Item MDAP/MAIS Code: N/A

|  | D. d. a. a.    |                  |                    | EV 0040          | EV 0040         | EV 0040        |                       |                       |                       |                       | <b>-</b> |                        |
|--|----------------|------------------|--------------------|------------------|-----------------|----------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|------------------------|
|  | Prior          |                  |                    | FY 2018          | FY 2018         | FY 2018        |                       |                       |                       |                       | То       |                        |
| Resource Summary                               | Years          | FY 2016          | FY 2017            | Base             | oco             | Total          | FY 2019               | FY 2020               | FY 2021               | FY 2022               | Complete | Total                  |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Cost (\$ in Millions)      | 0.000          | 21.511           | 21.667             | 40.116           | 0.000           | 40.116         | 38.633 <sup>(a)</sup> | 21.953 <sup>(b)</sup> | 25.535 <sup>(c)</sup> | 22.751 <sup>(d)</sup> | -        | 192.166 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Net Procurement (P-1) (\$ in Millions)         | 0.000          | 21.511           | 21.667             | 40.116           | 0.000           | 40.116         | 38.633                | 21.953                | 25.535                | 22.751                | -        | 192.166                |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Total Obligation Authority (\$ in Millions)    | 0.000          | 21.511           | 21.667             | 40.116           | 0.000           | 40.116         | 38.633                | 21.953                | 25.535                | 22.751                | -        | 192.166                |
| (The following                                 | g Resource Sum | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget request | s are documente       | ed elsewhere.)        |                       |                       |          |                        |
| Initial Spares (\$ in Millions)                | -              | 0.100            | 0.100              | 0.109            | -               | 0.109          | -                     | -                     | -                     | -                     | -        | 0.309                  |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Unit Cost (\$ in Millions) | _              | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |

#### **Description:**

PF 0305111F WEATHER SERVICE

The Weather Observation Forecast procurement line acquires meteorological equipment and ground-based space environment sensing systems supporting the global missions of the Air Force (AF), Army, Special Operations Forces (SOF), combatant commands, and other government agencies. Additionally, these funds procure information system equipment for processing, storing, and disseminating weather information for analysis, forecasting, and mission integration at the strategic, operational, and tactical levels. Fixed and transportable equipment provides observing and forecasting capabilities for home station and deployed locations in support of worldwide Air and Space Expeditionary Forces and Army forces. Weather system technological upgrades provide critical support to modern air and space combat operations. These systems enhance the effectiveness and survivability of AF weapon systems and precision munitions by accurately predicting environmental impacts to optimize mission execution and planning, targeting, weaponeering, and battle damage assessment, as well as space systems operations and effectiveness. Management services costs include Federally Funded Research and Development Centers and Advisory and Assistance Services.

AF Weather Weapon System (AFWWS) activities align under four capability areas: 1) Weather Data Collection, 2) Weather Data Analysis and Dissemination, 3) Weather Forecasting, and 4) Product Tailoring/Warfighter Applications. This alignment ensures an integrated and systems-oriented approach to program management decisions. Development funding for Weather Observation/Forecast is in Program Element (PE) 0305111F, Weather Service.

- 1. Weather Data Collection: Provides automated atmospheric (a.k.a. terrestrial) and space environmental sensing capabilities at fixed and deployed locations worldwide. The data gathered by multiple sensor systems is exploited for environmental battlespace awareness, characterization, safety of flight, and resource protection. Items A-D (below) were formerly consolidated as "Observing System 21st Century (OS-21)."
- A. AN/FMQ-23: Fixed automated weather observing system that collects weather elements and formulates aviation surface weather reports.
- B. Next Generation Ionosonde (NEXION): Ionospheric Ground Sensors (IGS) capital equipment replacement consists replacement of unsupportable, functionally obsolete, and inoperable NEXION, Ionospheric Scintillation Total Electron Count Observer (ISTO), and other similar equipment. IGS data is transmitted via Non-classified Internet Protocol Router Network (NIPRNET) to ACC/557th Weather Wing and is utilized to show real-time impacts to DoD Satellite Communication (SATCOM) users; and provide geo-location; Global Positioning System (GPS) error and corrections, and comm forecasts. NEXION is a Commercial off-the-shelf (COTS) vertical incidence low-power radar sensor that obtains measurements of the ionosphere from directly overhead in the medium and high frequency radio bands (2-30 MHz). Ionospheric

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Page 1 of 10 P-1 Line #20

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833070 / Weather Observation Forecast

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305111F

Line Item MDAP/MAIS Code: N/A

Scintillation Total Electron Count Observer (ISTO) is a world-wide network of COTS, ground-based, passive, multi-frequency receivers that measure ionospheric scintillation and total electron content in real-time by analyzing various satellite signals. This is not a new start.

- C. Portable Doppler Radar (PDR): Transportable Doppler weather radar system that provides situational awareness via detection of precipitation and wind patterns in forward areas in support of combat operations. System is COTS. System was previously purchased in FY13. This purchase will replace systems worn out by constant use at deployed locations and for new deployed locations requiring a PDR.
- 2. Weather Data Analysis and Dissemination: Assimilates worldwide sources of atmospheric and space weather data, produces decision-quality information for warfighters, and disseminates those products to intermediate and end users via a net-centric interface ensuring data integrity and continuity of service. Weather data formats and transmission protocols support DoD's Data Services Environment and Meteorological and Oceanographic Community of Interest objectives for integration into warfighter command and control, mission planning, and modeling and simulation systems. Improved analysis of real-time weather information supports DoD's role in transformation of the National Airspace System through the Next Generation Air Transportation System and enhances Air Force energy security plans.

A. Weather Data Analysis(WDA)-The Weather Data Analysis (WDA) program of record provides a large-scale data processing, product generation, and presentation system supporting Open Geospatial Consortium (OGC) services architecture and providing capability to ingest, process, store, access, and disseminate meteorological oceanographic (METOC) data. DoD Warfighter Capability/Benefits include the following; centralized Weather Web Service capability, increased availability of weather impacts and products, improved global, regional, and execution forecasts, specific, mission tailored weather data on demand, and finally integrated M2M interfaces that shorten the Combatant Command (COCOM) kill chain. Additionally, WDA provides data storage and network infrastructure supporting production, development, and testing activities and transport of data among multiple nodes and classification levels. Specifically, Enterprise Storage provides storage and the capability to move data between various storage devices. Ingest Services ensure data providers can present their data to designated storage and Dissemination Services and ensure data consumers have access to storage and/or the ability to move data to location specified by the consumer. Ingest, Dissemination, and Storage services are provided in Non-classified Internet Protocol Router (NIPR), Secret Internet Protocol Router (SIPR), and Sensitive Compartmented Information (SCI) for Production, Test and Development activities in varying degrees. All aspects of Enterprise Storage are in the approved architecture, bound by best security practice principles, in an effort to meet security requirements, standardize, and eliminate one-off solutions, wherever possible.

- 3. Weather Forecasting: Provides numerical weather prediction, cloud, space environment, and atmospheric constituent (e.g., aerosols) forecast models and other environmental forecast products for worldwide AF, Army, SOF, space, and national intelligence community operational support. Uses high-performance computer servers and high-capacity storage for atmospheric and space weather modeling and worldwide environmental forecast products within DoD Data Center 14866.
- A. Numerical Weather Modeling (NWM)--Provides atmospheric and space weather modeling and worldwide environmental forecast products supporting military and intelligence operations worldwide.

Supports technology insertion/scientific improvements and sustainment to USAF weather analysis and forecasting capability with emphasis on clouds, theater-scale weather, and aerosol/chemical constituents. Provides improvements to specific weather capability gaps to Joint/USAF mission areas, and provides forecast products to create advisories and warnings for DoD resource protection.

4. Product Tailoring/Warfighter Applications:

Provides timely, local and regional target-scale weather information to operational commanders within a given Area of Responsibility and at tactical levels provides front-line weather information to warfighters in support of combat operations. Supports the 'train as you fight' concept by assuring fixed and deployable systems have a similar performance parameters and user interfaces.

A. Joint Environmental Toolkit (JET)--Provides a standard AF Weather forecaster toolkit to ingest weather data and deliver timely, tailorable, precise weather impacts to the warfighter.

Funding for this exhibit is contained in PE 0305111F

Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833070 / Weather Observation Forecast

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305111F

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | FMQ-23                         |             | Α        |                       | - / -                                    | 7 / 2.492                                | 7 / 2.585                                | - / 1.268                                | - / -                                    | - / 1.268                                |
| P-5             | JET                            |             | В        |                       | - / -                                    | - /2.593                                 | - /2.153                                 | - / 0.740                                | - / -                                    | - / 0.740                                |
| P-40a           | NEXION/MOK/UAFO/MWS/PDR        |             |          |                       | - / -                                    | - /3.000                                 | - /2.823                                 | - / 12.131                               | - / -                                    | - / 12.131                               |
| P-5             | WDA                            |             | В        |                       | - / -                                    | - /7.690                                 | - / 10.256                               | - / 16.148                               | - / -                                    | - / 16.148                               |
| P-40a           | WOF                            |             |          |                       | - / 0.000                                | - / 5.736                                | - /3.850                                 | - / 9.829                                | - / 0.000                                | - / 9.829                                |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - / 0.000                                | - / 21.511                               | - / 21.667                               | - / 40.116                               | - / 0.000                                | - / 40.116                               |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

This program, Weather Observation Forecast P-40A Item Portable Doppler Radar, is a new start.

PE 0305111F WEATHER SERVICE

1. Weather Data Collection:

A. AN/FMQ-23: Ordering period for contract ends FY17. Funds support 6 installations of previously purchased systems during FY18.

- B. Next Generation Ionosonde (NEXION): IGS NEXION-ISTO will fund site feasibility surveys and NEXION equipment installations at its Pacific, Caribbean, and Africa sites as well as the replacement of unsupportable, obsolete, and inoperable capital equipment in FY18. Continue program office and other related support activities that may include but are not limited to studies, federally Funded Research and Development Centers (FFRDC), System Engineering and Technical Assistance (SETA), and technical analysis.
- C. Portable Doppler Radar (PDR): 11 systems will be acquired.
- 2. Weather Data Analysis (WDA) and Dissemination:

A. WDA: FY18 funding will procure computer hardware and associated integration software within DoD Data Centers 14866 and 17036 in order to complete WDA Inc 4 Build C and begin Inc 4 Build D as well as Air Force Weather Web Services (AFW-WEBS) Build 2.0. Efforts will expand the WDA database, begin a single services delivery baseline, provide a net-centric delivery of weather data to weather, command and control, and other forces, provide a Cross Domain Solution data filter refresh and provides a robust infrastructure to enable exploitation of environmental data records from DoD and leveraged satellite sources. In addition, it will increase the storage capacity for the new weather satellites and numerical weather modeling data by procuring additional IT infrastructure to support launches during this fiscal year.

3. Weather Forecasting:

A. Numerical Weather Modeling (NWM): FY18 funding will procure computer servers, processors, and storage to refresh the Cloud Depiction and Forecast System Version 2.0 (CDFS II) to support improved worldwide cloud analysis and forecast capability. FY18 funding will also procure a liquid cooling capability to support the next generation high performance computing system scheduled for installation in FY19.

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|---|--|---|--|
| Exhibit P-40, Budget Line Item Justification: F)  | ′ 2018 Air Force   |   | <b>Date</b> : May 2017   |
| Appropriation / Budget Activity / Budget Sub A<br>3080F: Other Procurement, Air Force / BA 03: Ele<br>Equip / BSA 3: Electronics Programs |  | P-1 Line Item No<br>833070 / Weathe             | umber / Title:<br>er Observation Forecast  |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It   | ems: N/A  | Other Related Program Elements: 0305111F   |
| Line Item MDAP/MAIS Code: N/A   |  |   |  |
| Product Tailoring/Warfighter Applications:  |  |   |  |
| A. Joint Environmental Toolkit (JET): FY18 funding will procur 23rd Special Operations Weather Squadron) at fixed and depl                | e integrated computer hardware and softwa<br>oyed AF, Army, and SOF locations in the c | are suites and associat ontinental United State | ted systems interfaces for operational weather support (for DOD Datacenter 18393, es and overseas. |
| Efforts with funding starting in FY 2019 through FY 2022 a follows:   | are summarized on the P-40. Not all deta   | ils of this funding are                         | e included in this P-40 exhibit set. A summary of the excepted details is as                       |
|   |  | (a) FY 2019 Cost De                             | elta: 38.633 million   |
|   |  | (b) FY 2020 Cost De                             | elta: 21.953 million   |
|   |  | (c) FY 2021 Cost De                             |  |
|   |  | (d) FY 2022 Cost De                             |  |
|   |  | (e) FY Total Cost De                            | elta: 192.166 million  |
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LI 833070 - Weather Observation Forecast Air Force

Exhibit P-5, Cost Analysis: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 3080F / 03 / 3 - / FMQ-23 833070 / Weather Observation Forecast ID O - -I -

MDAD/MAIO Ossiss

| ID Code (A=Service Ready, B=Not Service Ready): A     |                              | IV                       | DAP/MAIS Code:              |              |             |               |
|---|------------------------------|--------------------------|-----------------------------|--------------|-------------|---------------|
| Resource Summary                                      | Prior Years                  | FY 2016                  | FY 2017                     | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                  | -                            |                          | 7                           | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)             | -                            | 2.49                     | 2.585                       | 1.268        | -           | 1.268         |
| Less PY Advance Procurement (\$ in Millions)          | -                            | -                        | -                           | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                | -                            | 2.492                    | 2.585                       | 1.268        | -           | 1.268         |
| Plus CY Advance Procurement (\$ in Millions)          | -                            | -                        | -                           | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)           | -                            | 2.49                     | 2.585                       | 1.268        | -           | 1.268         |
| (The following Resource Summary rows are for informat | ional purposes only. The cor | responding budget reques | sts are documented elsewher | re.)         |             | ?             |
| Initial Spares (\$ in Millions)                       | -                            | -                        | 0.000                       | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)        | -                            | 0.350                    | 0.369                       | -            | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | P         | rior Years    | 5                       |           | FY 2016       |                         |           | FY 2017              |                         | F۱        | / 2018 Ba     | se                      | F۱        | / 2018 OC     | 0                       | F۱        | / 2018 Tot    | :al                     |
|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements  | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - Hardware End Ite  | m Cost    |               |                         | •         | '             |                         |           |                      | '                       |           |               |                         | '         |               | '                       | '         |               |                         |
| Recurring Cost   |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |
| FMQ-23   | -         | -             | -                       | 0.214     | 7             | 1.500                   | 0.214     | 7                    | 1.500                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | 0.00                    |
| Subtotal: Recurring Cost   | -         | -             | -                       | -         | -             | 1.500                   | -         | -                    | 1.500                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | 0.00                    |
| Subtotal: Hardware -<br>Hardware End Item Cost                     | -         | -             | -                       | -         | -             | 1.500                   | -         | -                    | 1.500                   |           | -             | 0.000                   | -         | -             | -                       | -         | -             | 0.00                    |
| Support - Support End Item C                                       | Cost      |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |
| TESTING FMQ-23   | -         | -             | -                       | -         | -             | 0.054                   | -         | -                    | 0.055                   | -         | -             | 0.045                   | -         | -             | -                       | -         | -             | 0.04                    |
| INTERIM CONTRACTOR<br>SUPPORT LABOR<br>FMQ-23                      | -         | -             | -                       | -         | -             | 0.081                   | -         | -                    | 0.112                   | -         | -             | 0.040                   | -         | -             | -                       | -         | -             | 0.04                    |
| DIRECT MISSION<br>SUPPORT<br>CONTRACTOR<br>SERVICES FMQ-23         | -         | -             | -                       | -         | -             | 0.250                   | -         | -                    | 0.233                   | -         | -             | 0.503                   | -         | -             | -                       | -         | -             | 0.5                     |
| PROGRAM MANAGEMENT ADMINISTRATION CONTRACTOR SERVICES FMQ 23       | -         | -             | -                       | -         | -             | 0.546                   | -         | -                    | 0.623                   | -         | -             | 0.330                   | -         | -             | -                       | -         | -             | 0.3                     |
| PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENT SERVICES FMQ 23 | -         | -             | -                       | -         | -             | 0.061                   | -         | -                    | 0.062                   | -         | -             | 0.350                   | -         | -             | -                       | -         | -             | 0.3                     |
| Subtotal: Support - Support<br>End Item Cost                       | -         | -             | -                       | -         | -             | 0.992                   | -         | -                    | 1.085                   | -         | -             | 1.268                   | -         | -             | -                       | -         | -             | 1.20                    |

LI 833070 - Weather Observation Forecast Air Force

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P-1 Line #20

Volume 1 - 145

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

3080F / 03 / 3

833070 / Weather Observation Forecast - / FMQ-23

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|                          | F         | Prior Years   | s                       |           | FY 2016       |                         |           | FY 2017       |                         | F         | ′ 2018 Bas    | se                      | FY        | 7 2018 OC     | 0                       | F         | <b>Y 2018 Tot</b> | al                      |
|--------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|-------------------|-------------------------|
| Cost Elements            | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)     | Total<br>Cost<br>(\$ M) |
| Gross/Weapon System Cost | -         | -             | -                       | 0.356     | 7             | 2.492                   | 0.369     | 7             | 2.585                   | -         | -             | 1.268                   | -         | -             | -                       | -         | -                 | 1.268                   |

Exhibit P-5, Cost Analysis: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 3080F / 03 / 3 833070 / Weather Observation Forecast - / JET MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): B **Prior Years** FY 2016 FY 2017 **FY 2018 Base FY 2018 OCO** FY 2018 Total **Resource Summary** Procurement Quantity (Units in Each) 0.740 Gross/Weapon System Cost (\$ in Millions) 2.593 2.153 0.740 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) -2.593 2.153 0.740 0.740 Plus CY Advance Procurement (\$ in Millions) -Total Obligation Authority (\$ in Millions) 2.593 2.153 0.740 0.740 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) Gross/Weapon System Unit Cost (\$ in Millions) \_ -\_ \_ -

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | P         | rior Years    | S                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ' 2018 Ba     | se                      | F۱        | / 2018 OC     | 0                       | FY        | ' 2018 Tot    | tal                     |
|---|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements   | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - JET Cost   | '         |               | '                       | '         |               |                         | '         |               |                         |           |               | '                       | '         |               | '                       | '         |               |                         |
| Recurring Cost  |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| JET REFRESH<br>EQUIPMENT  | -         | -             | -                       | 1.619     | 1             | 1.619                   | 1.143     | 1             | 1.143                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Subtotal: Recurring Cost  | -         | -             | -                       | -         | -             | 1.619                   | -         | -             | 1.143                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Subtotal: Hardware - JET<br>Cost                                | -         | -             | -                       | -         | -             | 1.619                   | -         | -             | 1.143                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Support - JET Cost  |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| DIRECT MISSION<br>SUPPORT<br>CONTRACTOR<br>SERVICES JET         | -         | -             | -                       | -         | -             | 0.094                   | -         | -             | 0.107                   | -         | -             | 0.109                   | -         | -             | -                       | -         | -             | 0.1                     |
| PROGRAM MANAGEMENT ADMINISTRATION CONTRACTOR SERVICES JET       | -         | -             | -                       | -         | -             | 0.827                   | -         | -             | 0.845                   | -         | -             | 0.572                   | -         | -             | -                       | -         | -             | 0.5                     |
| PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENT SERVICES JET | -         | -             | -                       | -         | -             | 0.053                   | -         | -             | 0.058                   | -         | -             | 0.059                   | -         | -             | -                       | -         | -             | 0.0                     |
| Subtotal: Support - JET Cost                                    | -         | -             | -                       | -         | -             | 0.974                   | -         | -             | 1.010                   | -         | -             | 0.740                   | -         | -             | -                       | -         | -             | 0.7                     |
| Gross/Weapon System<br>Cost                                     | -         | -             | -                       | -         | -             | 2.593                   | -         | -             | 2.153                   | -         | -             | 0.740                   | -         | -             | -                       | -         | -             | 0.7                     |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:
833070 / Weather Observation Forecast

NEXION/MOK/UAFO/MWS/PDR

|  |          |                       |           |               |                         |           | -                    |                         |           |               |                         |           |               |                         | 1         |               |                         | •         |                      |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|
|  |          |                       | F         | Prior Year    | s                       |           | FY 2016              |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | F         | / 2018 OC     | 0                       | FY        | ′ 2018 Tot           | tal                     |
| Item Number /<br>Title [DODIC]             | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - Hardware End                    | Item     | Cost                  |           | ,             | ,                       |           |                      | ,                       |           | *             |                         |           | ,             |                         |           | ,             | ,                       |           |                      |                         |
| NEXION                                     | Α        |                       | -         | -             | -                       | 0.250     | 2                    | 0.500                   | 0.251     | 2             | 0.501                   | 0.251     | 2             | 0.501                   | -         | -             | -                       | 0.251     | 2                    | 0.50                    |
| Portable Doppler<br>Radar                  | Α        |                       | -         | -             | -                       | -         | -                    | -                       | -         | -             | -                       | 0.750     | 11            | 8.250                   | -         | -             | -                       | 0.750     | 11                   | 8.250                   |
| Mobile Observing Kit (formerly REOS)       | А        |                       | -         | -             | 0.000                   | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       |
| Upper Air Follow On                        | Α        |                       | -         | -             | 0.000                   | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       |
| Subtotal: Hardware - Hard<br>Item Cost     | lware    | End                   | -         | -             | -                       | -         | -                    | 0.500                   | -         | -             | 0.501                   | -         | -             | 8.751                   | -         | -             | -                       | -         | -                    | 8.751                   |
| Support - Support End Ite                  | m Co     | st                    |           | ,             |                         |           |                      | ,                       |           |               |                         |           | ,             |                         |           |               | ,                       |           |                      |                         |
| INSTALLATION<br>NEXION                     | Α        |                       | -         | -             | -                       | 1.250     | 2                    | 2.500                   | 1.161     | 2             | 2.322                   | 1.690     | 2             | 3.380                   | -         | -             | -                       | 1.690     | 2                    | 3.380                   |
| ASSISTANCE AND<br>ADVISORY SERVICE<br>A&AS | A        |                       | -         | -             | -                       | -         | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -                    | 0.000                   |
| Subtotal: Support - Suppo<br>Cost          | ort Er   | d Item                | -         | -             |                         | -         | -                    | 2.500                   | -         | -             | 2.322                   | -         |               | 3.380                   | -         | -             | -                       | -         | -                    | 3.380                   |
| Total                                      |          |                       | -         | -             | -                       | -         | -                    | 3.000                   | -         | -             | 2.823                   | -         | -             | 12.131                  | -         | -             | -                       | -         | -                    | 12.131                  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-5, Cost Analysis: FY 2018 Air Force **Date:** May 2017 Item Number / Title [DODIC]: Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: 3080F / 03 / 3 833070 / Weather Observation Forecast - / WDA MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready) : B **Resource Summary Prior Years FY 2016 FY 2018 Base** FY 2018 Total FY 2017 **FY 2018 OCO** Procurement Quantity (Units in Each) Gross/Weapon System Cost (\$ in Millions) 7.690 10.256 16.148 16.148 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 7.690 10.256 16.148 16.148 \_ \_ Plus CY Advance Procurement (\$ in Millions) \_ \_ Total Obligation Authority (\$ in Millions) 7.690 10.256 16.148 16.148 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) \_ Gross/Weapon System Unit Cost (\$ in Millions) \_ \_ Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. **Prior Years** FY 2016 FY 2017 **FY 2018 Base FY 2018 OCO** FY 2018 Total Total Total Total Total Total Total **Unit Cost Unit Cost** Qty Cost **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty Qty Cost Cost Cost Cost Cost Cost Elements (\$ M) (Each) (\$ M) (\$ M) (Each) (Each) (\$ M) (Each) (\$ M) (Each) (\$ M) (Each) (\$ M) (\$ M) (\$ M) (\$ M) (\$ M) (\$ M) Hardware - WDA Cost Non Recurring Cost Hardware-Weather 7.278 7.278 9.840 15.724 15.724 Service Cost Subtotal: Non Recurring 7.278 9.840 15.724 15.724 Cost Subtotal: Hardware - WDA 7.278 15.724 9.840 15.724 Cost Support - WDA Cost PROGRAM MANAGEMENT **ADMINISTRATION** 0.268 0.143 0.146 0.146 CONTRACTOR **SERVICES PROGRAM** MANAGEMENT ADMINISTRATION 0.144 0.273 0.278 0.278 OTHER GOVERNMENT SERVICES Subtotal: Support - WDA 0.412 0.416 0.424 0.424 Cost

UNCLASSIFIED LI 833070 - Weather Observation Forecast

Gross/Weapon System

Air Force

16.148

16.148

10.256

7.690

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:
833070 / Weather Observation Forecast

WOF

|  |    |                       | P         | rior Years           | s                       |           | FY 2016              |                         |           | FY 2017              |                         | FY        | 2018 Bas             | se                      | FY        | / 2018 OC            | ю.                      | FY        | / 2018 Tot    | tal                     |
|--|----|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title                        | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| WOF2 / Numerical<br>Weather Modeling (NWM) |    |                       | -         | -                    | 0.000                   | -         | -                    | 5.736                   | -         | -                    | 3.850                   | -         | -                    | 9.829                   | -         | -                    | 0.000                   | -         | -             | 9.829                   |
| Total                                      |    |                       | -         | -                    | 0.000                   | -         | -                    | 5.736                   | -         | -                    | 3.850                   | -         | -                    | 9.829                   | -         | -                    | 0.000                   | -         | -             | 9.829                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### **Modification Information:**

| Item Number / Title                     | Models of Systems Affected | Modification Type      |
|---|----------------------------|------------------------|
| WOF2 / Numerical Weather Modeling (NWM) | NWM                        | Capability Improvement |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833140 / Strategic Command And Control

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0301112F

Line Item MDAP/MAIS Code: N/A

| Prior        |                      |                    | FY 2018   | FY 2018   | FY 2018  |   |   |  |  | То   |   |
|--------------|----------------------|--------------------|---|---|--|---|---|--|--|--|---|
| Years        | FY 2016              | FY 2017            | Base  | oco   | Total  | FY 2019   | FY 2020   | FY 2021  | FY 2022  | Complete   | Total   |
| -            | -                    | -                  | -   | -   | -  | -   | -   | -  | -  | -  | -   |
| -            | 286.980              | 39.803             | 72.810  | 0.000   | 72.810   | 37.115  | 18.165  | 17.966   | 18.320   | -  | 491.159   |
| -            | -                    | -                  | -   | -   | -  | -   | -   | -  | -  | -  | -   |
| -            | 286.980              | 39.803             | 72.810  | 0.000   | 72.810   | 37.115  | 18.165  | 17.966   | 18.320   | -  | 491.159   |
| -            | -                    | -                  | -   | -   | -  | -   | -   | -  | -  | -  | -   |
| -            | 286.980              | 39.803             | 72.810  | 0.000   | 72.810   | 37.115  | 18.165  | 17.966   | 18.320   | -  | 491.159   |
| Resource Sum | mary rows are fo     | or informational p | ourposes only. Th   | e corresponding   | budget request   | s are documente   | ed elsewhere.)  |  |  |  |   |
| -            | -                    | -                  | -   | -   | -  | -   | -   | -  | -  | -  | -   |
| -            | -                    | -                  | -   | -   | -  | -   | -   | -  | -  | -  | -   |
| -            | -                    | -                  | -   | -   | -  | -   | -   | -  | -  | -  | -   |
|              | Years Resource Sum - | Years FY 2016      | Years         FY 2016         FY 2017           -         -         -           -         286.980         39.803           -         -         -           -         286.980         39.803           -         -         -           -         286.980         39.803           Resource Summary rows are for informational properties of the properties o | Years         FY 2016         FY 2017         Base           -         -         -         -           -         286.980         39.803         72.810           -         -         -         -           -         286.980         39.803         72.810           -         -         -         -           -         286.980         39.803         72.810           Resource Summary rows are for informational purposes only. The         -         -           -         -         -         -           -         -         -         -           -         -         -         - | Years         FY 2016         FY 2017         Base         OCO           - | Years         FY 2016         FY 2017         Base         OCO         Total           -         -         -         -         -         -           -         286.980         39.803         72.810         0.000         72.810           -         -         -         -         -         -           -         286.980         39.803         72.810         0.000         72.810           -         -         -         -         -         -           -         286.980         39.803         72.810         0.000         72.810           Resource Summary rows are for informational purposes only. The corresponding budget request         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         - | Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019           -         -         -         -         -         -         -         -           -         286.980         39.803         72.810         0.000         72.810         37.115           -         -         -         -         -         -         -           -         286.980         39.803         72.810         0.000         72.810         37.115           -         -         -         -         -         -         -           -         286.980         39.803         72.810         0.000         72.810         37.115           -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -< | Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019         FY 2020           - | Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019         FY 2020         FY 2021           - <td>Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019         FY 2020         FY 2021         FY 2022           -         <t< td=""><td>Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019         FY 2020         FY 2021         FY 2022         Complete           -</td></t<></td> | Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019         FY 2020         FY 2021         FY 2022           - <t< td=""><td>Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019         FY 2020         FY 2021         FY 2022         Complete           -</td></t<> | Years         FY 2016         FY 2017         Base         OCO         Total         FY 2019         FY 2020         FY 2021         FY 2022         Complete           - |

#### **Description:**

PE 0101127F B-2 Squadrons - P-40A PE 0101127F B-2 SQUADRONS

B-2 SUPPORT: The B-2 weapon system relies heavily on C2 equipment to meet its operational capability. Funding is used to replace obsolete computer equipment, backbone infrastructure hardware and software, and long haul communications equipment at the Weapon System Support Center (WSSC) Ground Test Facility (GTF), and contractor laboratories. This includes COTS items such as computers, displays, printers, disk and tape drives, software (e.g. computer-aided design (CAD) and analysis software) as well as engineering and logistical support. Funds also procure specialized computers that provide on-line access to B-2 aircraft data and low observable analysis capabilities. Unique B-2 security and communication infrastructure needs are also addressed.

The B-2 Weapon System Support Center (WSSC) Ground Test Facility (GTF), located at Oklahoma Air Logistics Center, Tinker AFB, OK, supports two critical functions: aircraft software development and maintenance/support, plus systems engineering support for the fielded weapon system. Software maintenance fixes to aircraft systems include flight controls, flight management, navigation systems, weapons/ armament and the defensive management system. These software fixes are accomplished and tested with the use of the WSSC software development system and integration/test laboratory complex by analyzing and designing fixes to the existing aircraft software. The WSSC GTF also provides engineering support with specialized computer systems that provide online access to B-2 aircraft data. This data consists of items such as engineering and organic low observable analysis, manufacturing, aircraft design data used to help solve technical issues on the B-2. Locations where this data is used include Tinker AFB, Whiteman AFB, Wright-Patterson AFB, Northrop-Grumman in Palmdale, CA and forward operating locations (FOL).

PE 0101313F Strat War Planning System - USSTRATCOM - P-40A PE 0101313F - STRATEGIC WAR PLANNING SYSTEM - USSTRATCOM:

Funding for this program has moved to WSC 833560

PE 0101316F Worldwide Joint Strategic Communications - P-40A PE 0101316F WORLDWIDE JOINT STRATEGIC COMMUNICATIONS

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Page 1 of 12

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 833140 / Strategic Command And Control

Equip / BSA 3: Electronics Programs ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0301112F

Line Item MDAP/MAIS Code: N/A

Emergency Action Messages (EAMs) are highly structured, authenticated messages primarily used in the command and control of nuclear forces. They are disseminated over numerous survivable and nonsurvivable communication systems including terrestrial and space systems. Programmed funds procure system components, spares, software, and necessary support services for systems such as the Strategic Automated Command and Control System (SACCS), the Defense Injection Reception Emergency Action Message (EAM) C2 Terminals (DIRECT), Aircrew Alerting Communications Electromagnetic Pulse (AACE), the Strategic Emergency Action Transmission System (SEATS), and the Defense Red Switch Network (DRSN). SACCS is a secure Nuclear Command, Control, and Communications (NC3) system that directly supports National Command Authority (NCA) communications in the command and control of strategic and non-strategic forces. SACCS enables the NCA to disseminate Higher Authority Command Messages, Force Direction Messages, EAMs, and automated ICBM re-targeting data to the USAF's two legs (ICBM and bomber fleets) of the nuclear triad; the reconnaissance, tanker, USAFE munitions, and Special Operations communities; and to other Active Duty, Guard, and Reserve DoD users worldwide. DIRECT includes the hardware and software to enable the NCA to transmit nuclear and non-nuclear EAMs and other time-critical messages to strategic and non-strategic forces. The equipment requested is representative of those items capable of providing the required operational capability. The specific items procured may vary depending upon available technology at the time of procurement. Funding may be used to address Diminishing Manufacturing Sources (DMS) issues. Development funding for this exhibit contained in PE 0101316F.

PE 0208059F Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities) - P-40A

US Cyber Command (USCYBERCOM) Cyberspace Situational Awareness (SA) capabilities provides Combatant Commands the ability to detect anomalies within friendly networks, and to link cyber key terrain to cyber and kinetic mission needs and timelines. FY18 is the last year of funding for Cyber SA.

PE 0301112F Nuclear Planning and Execution System (NPES) - P-40A

NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES): NPES is a National C2 automated information system (AIS) that supports all phases of nuclear conflict. The requirement includes NPES development, test, communication systems and operational server integration with fixed command centers, distributed sites, and mobile platforms. NPES is a joint program, with the Air Force assigned lead service responsibilities. All NPES funding covers the development, test, and operational server suites for fixed command centers, distributive sites and mobile platforms. Funding for this effort is in program element 0301112F.

Funding supports the NPES environment suites as well as the 4th Generation Servers for the mobile platform environment. Currently, all sites are operating under an x86 architecture with the airborne platforms still under Solaris/SPARC. The FY17 funding covers a communications equipment refresh for additional ancillary equipment for the operational sites, and PMA contractor support for equipment purchases, sustainment activities, and security certifications. Also, a refresh of the Development/Test displays was necessary due to end-of-life/support. FY18 funding will be necessary to refresh the NPES development environment in the new C2F. This refresh will be accomplished by SPAWAR and well in-house contractor support (PMA). Funding for this effort is in program element 0301112F.

In FY17 this program was a NEW START.

PE 0303255F Command, Control, Communication, and Computers (C4) - STRATCOM - P-40A PE 0303255F - SERVICE SUPPORT TO USSTRATCOM - C4:

5. SERVICE SUPPORT TO USSTRATCOM - C4:

a. NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES): NPES is the single, survivable national C2 Automated Information System (AIS) supporting the President, Secretary of Defense, Joint Staff, and nuclear Combatant Commanders in the transition/post phases of nuclear conflict. The requirement includes NPES development, test, and operational server integration with fixed command centers, distributed sites, and mobile platforms (USNORTHCOM's Mobile Consolidated Command Center, Navy E-6B Airborne National Command Post, and Air Force E-4B National Airborne Operations Center). NPES is a joint program with the Air Force assigned lead service responsibilities. Programmed funds support the integration of an upgraded communication interface, new test suites and deployable, ruggedized prototypes for the mobile platform. They also support the technical refresh of all NPES fixed and mobile sites and the migration of them into a Net-Centric environment, NOTE; Beginning in FY18 the NPES Legacy procurement portfolio has moved out of PE 0303255F to PE 0301112F under the Air Force Life Cycle Management Command (AFLCMC)

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|  | UNCLA  | SSIFIED  |                                       |                                   |
|--|--|--|---------------------------------------|-----------------------------------|
| Exhibit P-40, Budget Line Item Justification: FY 2018  | Air Force  |  | Date: May 20                          | )17                               |
| Appropriation / Budget Activity / Budget Sub Activity 3080F: Other Procurement, Air Force / BA 03: Electronic Equip / BSA 3: Electronics Programs  |  | P-1 Line Item Number / Titl<br>833140 / Strategic Comman                     |                                       |                                   |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It   | ems: N/A   | Other Related Program Element         | <b>s</b> : 0301112F               |
| Line Item MDAP/MAIS Code: N/A  |  |  |                                       |                                   |
| b. USSTRATCOM C2 SYSTEMS LIFECYCLE HARDWARE MANAGE making for USSTRATCOM and Air Force Space Command (AFSPC). achieve the broad operational warfighting capabilities. The effort add through a grid of supporting services. This effort was previously referred. | This effort employs a set of underly scapability as it builds to a final arc | ying information services, technologichitecture. The cyber architecture is a | es, and tools that enable the Comn    | nander of USSTRATCOM to           |
| c. ANALYSIS AND TARGETING - JOINT WARFARE ANALYSIS CEN coordinates directly with the staffs of all Unified Commands, Departme crises.  |  |  |                                       |                                   |
| d. FORCE SURVIVABILITY, ANALYSIS, AND MANAGEMENT SYSTI<br>Survival (post attack) information needed to ensure survival of strategi<br>(FSR) with missile attack warning information. Processing and Display  | c forces. FSAM provides the comm   | nander vital decision making data by   | correlating strategic force status re | eported by Force Status Reporting |
| e. GLOBAL DISTRIBUTED COMMAND AND CONTROL (GDC2): De Branch (SAF/AQID) at (202) 404-3405.  | stailed information is classified and  | will be provided on a need to know be  | asis. For further information please  | contact the Strategic C2 Systems  |
| f. USSTRATCOM REPLACEMENT FACILITY FIT-OUT: USSTRATCO space, and network command and control operations require secure a Shielded Command and Control Center, mainframe computer data cersource, Technical Control Facility, and Fiber Ring.                     | and survivable infrastructure. The fa  | cility includes features and capabilitie                                     | es such as secure High-Altitude Ele   | ectromagnetic Pulse (HEMP)        |
| Funding for this exhibit contained in PE 0303255F.   |  |  |                                       |                                   |
|  |  |  |                                       |                                   |
|  |  |  |                                       |                                   |
|  |  |  |                                       |                                   |
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|  |  |  |                                       |                                   |
|  |  |  |                                       |                                   |

LI 833140 - Strategic Command And Control Air Force

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833140 / Strategic Command And Control

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0301112F

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule   |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|---|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*  | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | B-2 Squadrons   |             |          |                       | - / -                                    | - / 0.493                                | - / 0.496                                | - / 0.511                                | - / 0.000                                | - / 0.511                                |
| P-40a           | Worldwide Joint Strategic Communications                                |             |          |                       | - / -                                    | - / 0.248                                | - / 0.246                                | - / 6.497                                | - / 0.000                                | - / 6.497                                |
| P-40a           | Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities) |             |          |                       | - / -                                    | - /7.948                                 | - /7.872                                 | - /5.961                                 | - / 0.000                                | - / 5.961                                |
| P-40a           | Nuclear Planning and Execution System (NPES)                            |             |          |                       | - / -                                    | - / -                                    | - / -                                    | - /2.330                                 | - / -                                    | - / 2.330                                |
| P-40a           | Command, Control, Communication, and Computers (C4) - STRATCOM          |             |          |                       | - / -                                    | - / 278.291                              | - /31.189                                | - / 57.511                               | - / 0.000                                | - /57.511                                |
| P-40            | Total Gross/Weapon System Cost  |             |          |                       | - 1 -                                    | - / 286.980                              | - / 39.803                               | - / 72.810                               | - / 0.000                                | - / 72.810                               |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

PE 0101127F B-2 Squadrons - P-40A PE 0101127F B-2 SQUADRONS

B-2 SUPPORT: Funding continues the replacement of obsolete computer equipment, backbone infrastructure hardware and software, and long haul communications equipment at the Weapon System Support Center (WSSC) Ground Test Facility (GTF) and contractor software laboratories. Hardware and software purchased include COTS items such as uninterruptible power supplies, computers, displays, printers, disk and tape drives, software and installation and support services.

PE 0101313F Strat War Planning System - USSTRATCOM - P-40A PE 0101313F STRATEGIC WAR PLANNING SYSTEM - USSTRATCOM

Funding for this program has moved to WSC 833560

PE 0101316F Worldwide Joint Strategic Communications - P-40A PE 0101316F WORLDWIDE JOINT STRATEGIC COMMUNICATIONS

FY18 funds will procure replacement system components for SACCS. This includes modified COTS-based electronic equipment such as hard drives, storage devices, servers, and other electronic components that are representative of the most critical components required to allow continued operations. The specific SACCS components procured, e.g. SACCS Desktop Terminal System (SDT), SACCS Portable Terminal (SPT), and Keyboard Send Receive (KSR), may vary depending upon available technology at the time of procurement. FY18 funds (\$6.0M) will procure one DIRECT Terminal in support of EUCOM.

PE 0208059F Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities) - P-40A PE 0208059F US Cyber Command (USCYBERCOM)ACTIVITIES:

FY18 supports fielding Cyberspace Situational Awareness EOA Phase I to three combatant commands (USSOUTHCOM, USSOCOM, PACOM).

PE 0303255F Command, Control, Communication, and Computers (C4) - STRATCOM - P-40A

|  | UNCLA  | SSIFIED                |   |
|--|--|------------------------|---|
| Exhibit P-40, Budget Line Item Justification   | : FY 2018 Air Force                                |                        | <b>Date</b> : May 2017  |
| Appropriation / Budget Activity / Budget Su<br>3080F: Other Procurement, Air Force / BA 03:<br>Equip / BSA 3: Electronics Programs | _  |                        | Number / Title:<br>egic Command And Control   |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It                     | ems: N/A               | Other Related Program Elements: 0301112F  |
| Line Item MDAP/MAIS Code: N/A  |  |                        |   |
| PE 0303255F SERVICE SUPPORT TO STRATCOM, CO  | MMAND, CONTROL, COMMUNICATION AND                  | COMPUTER (C4):         |   |
|  | ent will also support mobile platforms as we intro | oduce X86 blades to    | act-of-Life (FoL) update of the NPES operational environment to support the DoD o the platform server configuration. NOTE: Beginning in FY18 the NPES Legacy nd (AFLCMC). |
| b. USSTRATCOM C2 SYSTEMS LIFECYCLE HARDWAI the C2 LAN and the Top Secret LAN, life-cycle replacement                               |  |                        | I C2 LAN Back Up and Recovery System, update of the Mass Storage appliances on vities.  |
| c. ANALYSIS AND TARGETING - JOINT WARFARE ANA  | ALYSIS CENTER (JWAC): FY18 funding will co         | ontinue life cycle rep | placement of critical analytical software and hardware for strategic solutions  |
| d. FORCE SURVIVABILITY, ANALYSIS, AND MANAGEN Protection applications that feed FSAM.  | MENT (FSAM). FY18 funding continues hardwa         | re/software update     | s for FSAM as well as the decision making tools of Force Status Readiness and Force   |
| e. GLOBAL DISTRIBUTED COMMAND AND CONTROL Branch (SAF/AQID) at (202) 404-3405.   | (GDC2): Detailed information is classified and     | will be provided on    | a need to know basis. For further information please contact the Strategic C2 Systems   |
| f. USSTRATCOM REPLACEMENT FACILITY FIT-OUT: Udevices; and, 2) Complete the transition of the Technical                             |  |                        | eas: 1) Complete the procurement of Audio Visual/VTC hardware, end-user client lware, software.   |
| Items requested in FY18 are representative of items to be mission requirements.  | procured. Specific items procured during exec      | ution may change b     | based on commercial availability and critical equipment needed to support current   |
|  |  |                        |   |
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|  |  |                        |   |
|  |  |                        |   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:

833140 / Strategic Command And Control

B-2 Squadrons

| 00001 7 00 7 0   |          |                       |           |                      |                         |           |                      | 0001407                 | Cirategi  | o oomini             | ana / til               | 3 0011110 |                      |                         |           | Z Oqua        | 310113                  |           |               |                         |
|--|----------|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | Р         | rior Years           | s                       |           | FY 2016              |                         |           | FY 2017              |                         | FΥ        | 2018 Bas             | se                      | F١        | 2018 OC       | 0                       | FY        | / 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]                         | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized  |          |                       |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |
| B-2 Weapon System<br>Support Center<br>(WSSC) Hardware | A        |                       | -         | -                    | -                       | -         | -                    | 0.493                   | -         | -                    | 0.496                   | -         | -                    | 0.511                   | -         | -             | 0.000                   | -         | -             | 0.511                   |
| Subtotal: Uncategorized                                |          |                       | -         | -                    | -                       | -         | -                    | 0.493                   | -         | -                    | 0.496                   | -         | -                    | 0.511                   | -         | -             | 0.000                   | -         | -             | 0.511                   |
| Total  |          |                       | -         | -                    | -                       | -         | =                    | 0.493                   | -         | -                    | 0.496                   | -         | -                    | 0.511                   | -         | -             | 0.000                   | -         | -             | 0.511                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 3

P-1 Line Item Number / Title:

833140 / Strategic Command And Control

Worldwide Joint Strategic
Communications

|   |    |       | F         | Prior Year | s      |           | FY 2016 |        |           | FY 2017 |        | FY        | ′ 2018 Bas | se     | F١        | / 2018 OC | 0      | FY        | 2018 Tot | al     |
|---|----|-------|-----------|------------|--------|-----------|---------|--------|-----------|---------|--------|-----------|------------|--------|-----------|-----------|--------|-----------|----------|--------|
|   |    | MDAP/ |           |            | Total  |           |         | Total  |           |         | Total  |           |            | Total  |           |           | Total  |           |          | Total  |
| Item Number /   | ID | MAIS  | Unit Cost | Qty        | Cost   | Unit Cost | Qty     |        | Unit Cost |         | Cost   | Unit Cost | Qty        | Cost   | Unit Cost | Qty       |        | Unit Cost |          | Cost   |
| Title [DODIC]   | CD | Code  | (\$ M)    | (Each)     | (\$ M) | (\$ M)    | (Each)  | (\$ M) | (\$ M)    | (Each)  | (\$ M) | (\$ M)    | (Each)     | (\$ M) | (\$ M)    | (Each)    | (\$ M) | (\$ M)    | (Each)   | (\$ M) |
| Uncategorized   |    |       |           |            |        |           |         |        |           |         |        |           |            |        |           |           |        |           |          |        |
| Defense Injection/<br>Reception Emergency<br>Action Message<br>Command and<br>Control Terminal<br>(DIRECT) System | A  |       | -         | -          | -      | -         | -       | -      | -         | -       | -      | 6.000     | 1          | 6.000  | -         |           | 0.000  | 6.000     | 1        | 6.000  |
| Strategic Automated<br>Command Control<br>Systems (SACCS)   | Α  |       | -         | -          | -      | 0.004     | 62      | 0.248  | 0.004     | 62      | 0.246  | 0.007     | 75         | 0.497  | -         | -         | 0.000  | 0.007     | 75       | 0.497  |
| Subtotal: Uncategorized   |    |       | -         | -          | -      | -         | -       | 0.248  | -         | -       | 0.246  | -         | -          | 6.497  | -         | -         | 0.000  | -         | -        | 6.497  |
| Total   |    |       | -         | -          | -      | -         | -       | 0.248  | -         | -       | 0.246  | -         | -          | 6.497  | -         | -         | 0.000  | -         | -        | 6.497  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

FY18 funds (\$6.0M) will procure one DIRECT Terminal in support of EUCOM.

Misc. COTS software and hardware items are purchased for all ISPAN programs through the centrally managed office at USSTRATCOM ISPAN Enterprise Systems Branch AFLCMC HBCC.

P-1 Line #21

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:

3080F / 03 / 3 833140 / Strategic Command And Control

Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)

|   |          |                       |             |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               | `                       |           |                  | ,                       |
|---|----------|-----------------------|-------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|------------------|-------------------------|
|   |          |                       | F           | Prior Year    | s                       |           | FY 2016       | ,                       |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | F         | Y 2018 OC     | o                       | F         | <b>7 2018 To</b> | tal                     |
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)    | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |             |               | ,                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         | ,         |                  |                         |
| Service Support to<br>Other Core Missions<br>- USSTRATCOM<br>(CYBERCOM<br>Activities) | A        |                       | -           | -             | -                       | -         | -             | 7.948                   | 7.872     | 1             | 7.872                   | -         | -             | 5.961                   | -         | -             | 0.000                   | -         | -                | 5.961                   |
| Subtotal: Uncategorized   |          |                       | -           | -             | -                       | -         | -             | 7.948                   | -         | -             | 7.872                   | -         | -             | 5.961                   | -         | -             | 0.000                   | -         | -                | 5.961                   |
| Total   |          |                       | -           | -             | -                       | -         | -             | 7.948                   | -         | -             | 7.872                   | -         | -             | 5.961                   | -         | -             | 0.000                   | -         | -                | 5.961                   |
| Note: Cubtotale or Tot  | من مام   | thin E                | hihit D 40a | may not be    |                         |           |               | i                       |           |               |                         |           |               |                         |           |               |                         |           |                  | ~                       |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Date: May 2017

**Appropriation / Budget Activity / Budget Sub Activity:** 3080F / 03 / 3

P-1 Line Item Number / Title:

833140 / Strategic Command And Control

Aggregated Items Title:
Nuclear Planning and Execution System

(NPES)

|   |        |                       |               |               |                         |           |               |                         |           |               |                         |           |               |                         | ١,        | ,             |                         |           |               |                         |
|---|--------|-----------------------|---------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |        |                       | Р             | rior Year     | 's                      |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | 2018 OC       | 0                       | FY        | ′ 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]  | ID     | MDAP/<br>MAIS<br>Code | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Nuclear Planning and Exe  | ecutio | on Syste              | em (PE 31112) |               | <u>'</u>                |           |               |                         | <u>'</u>  |               |                         | '         |               | <u>'</u>                |           |               | '                       |           |               |                         |
| Ruggedized<br>Equipment, E-4B,<br>E-6B, (includes GFE,<br>NRE, Installs, etc.)                        | A      |                       | -             | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Operational Sites<br>Refresh Turn-<br>Key Systems (SUN/<br>Windows Servers,<br>Storage, Clients, etc) | A      |                       | -             | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Test-System Refresh<br>(SUN/Windows<br>Servers, Storage,<br>Clients, etc)                             | Α      |                       | -             | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| DEV-System Refresh<br>(X86 Blade Servers,<br>Storage, Switches,<br>Clients, etc)                      | Α      |                       | -             | -             | -                       | -         | -             | -                       | -         | -             | -                       | 1.980     | 1             | 1.980                   | -         | -             | -                       | 1.980     | 1             | 1.9                     |
| Subtotal: Nuclear Plannir<br>Execution System (PE 31  |        | d                     | -             | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 1.980                   | -         | -             | -                       | -         | -             | 1.9                     |
| Program Management Ad   | lminis | stration              |               |               | ,                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Systems Operations  | В      |                       | -             | -             | -                       | -         | -             | -                       | -         | -             | -                       | 0.175     | 2             | 0.350                   | -         | -             | -                       | 0.175     | 2             | 0.35                    |
| Subtotal: Program Manag<br>Administration   | gemei  | nt                    | -             | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.350                   | -         | -             | -                       | -         | -             | 0.3                     |
| Total .   |        |                       | -             | -             | _                       | _         | _             | _                       | _         | _             | _                       | _         | _             | 2.330                   | _         | _             | _                       | _         | _             | 2.33                    |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 03 / 3

833140 / Strategic Command And Control

Aggregated Items Title:

**Date:** May 2017

Command, Control, Communication, and Computers (C4) - STRATCOM

|   |          |                       | P         | rior Year            | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FΥ        | ′ 2018 Ba            | se                      | FY        | / 2018 OC            | 0                       | FY        | 2018 Tot      | tal                     |
|---|----------|-----------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |
| NPES - COMM<br>SYSTEM (SMART<br>NEXT Turn-Key<br>System)                                    | A        |                       | -         | -                    | -                       | -         | -             | -                       | 0.300     | 7             | 2.100                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| NPES -<br>RUGGEDIZED<br>EQUIPMENT, E-4B,<br>E-6B  | A        |                       | -         | -                    | -                       | 0.400     | 5             | 2.000                   | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| NPES - Operational<br>Site Refresh  | Α        |                       | -         | -                    | -                       | -         | -             | -                       | 0.292     | 1             | 0.292                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| C2 LAN Infrastructure (C2 Modernization)  | Α        |                       | -         | -                    | -                       | -         | -             | -                       | 3.677     | 1             | 3.677                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| Mass Storage Devices<br>[Secret, TS], (C2<br>Modernization)                                 | Α        |                       | -         | -                    | -                       | -         | -             | -                       | 3.714     | 1             | 3.714                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| Net-Centricity<br>Migration Expansion<br>(C2 Modernization)                                 | Α        |                       | -         | -                    | -                       | 0.293     | 1             | 0.293                   | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| SUN/Windows<br>servers, storage,<br>clients etc (C2<br>Modernization)                       | A        |                       | -         | -                    | -                       | 0.500     | 7             | 3.500                   | -         | -             | -                       | 1.053     | 1                    | 1.053                   | -         | -                    | -                       | 1.053     | 1             | 1.05                    |
| Global Operations<br>Center (GOC)<br>Hardware, (C2<br>Modernization)                        | A        |                       | -         | -                    | -                       | 2.746     | 1             | 2.746                   | -         | -             | -                       | 2.793     | 1                    | 2.793                   | -         | -                    | -                       | 2.793     | 1             | 2.79                    |
| Miscellaneous<br>Infrastructure and<br>LAN Hardware,<br>[Classified], (C2<br>Modernization) | A        |                       | -         | -                    | -                       | 2.832     | 1             | 2.832                   | -         | -             | -                       | 2.880     | 1                    | 2.880                   | -         | -                    | -                       | 2.880     | 1             | 2.88                    |
| Subordinate Organizations System Hardware, [Classified], (C2 Modernization)                 | A        |                       | -         | -                    | -                       | 2.550     | 1             | 2.550                   | -         | -             | -                       | -         | -                    | 0.000                   | -         | -                    | -                       | -         | -             | 0.00                    |
| Analysis and<br>Targeting Systems,<br>(C2 Modernization)                                    | Α        |                       | -         | -                    | -                       | 0.085     | 1             | 0.085                   | 0.086     | 1             | 0.086                   | 0.081     | 1                    | 0.081                   | -         | -                    | -                       | 0.081     | 1             | 0.08                    |
| FSAM - Modernization<br>Procurement   | Α        |                       | -         | -                    | -                       | 1.337     | 1             | 1.337                   | 2.136     | 1             | 2.136                   | 2.061     | 1                    | 2.061                   | -         | -                    | -                       | 2.061     | 1             | 2.06                    |
| Global Distributed<br>Command and<br>Control (GDC2)   | Α        |                       | -         | -                    | -                       | -         | -             | -                       | 1.746     | 1             | 1.746                   | 1.772     | 1                    | 1.772                   | -         | -                    | -                       | 1.772     | 1             | 1.77                    |
| Node (s)  | Α        |                       | -         | -                    | -                       | 14.167    | 1             | 14.167                  | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |

LI 833140 - Strategic Command And Control Air Force

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P-1 Line #21

Volume 1 - 160

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 03 / 3

833140 / Strategic Command And Control

Aggregated Items Title:
Command, Control, Communication, and
Computers (C4) - STRATCOM

|  |          |                       | P         | rior Years    | S                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 Tot      | tal                     |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| New Bldg Fit Out -<br>Fiber Ring   | Α        |                       | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| New Bldg Fit<br>Out - Transition<br>Infrastructure                           | Α        |                       | -         | -             | -                       | 1.797     | 1             | 1.797                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| New Bldg Fit Out -<br>Premise Wiring   | Α        |                       | -         | -             | -                       | 35.363    | 1             | 35.363                  | 2.289     | 1             | 2.289                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| New Bldg Fit Out -<br>Electronic Security<br>Systems                         | А        |                       | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| New Bldg Fit<br>Out - Network /<br>Communications<br>systems                 | Α        |                       | -         | -             | -                       | 63.595    | 1             | 63.595                  | 4.211     | 1             | 4.211                   | 4.322     | 1             | 4.322                   | -         | -             | -                       | 4.322     | 1             | 4.3                     |
| New Bldg Fit Out -<br>Server / Client / Data<br>systems hardware             | Α        |                       | -         | -             | -                       | 72.668    | 1             | 72.668                  | 3.672     | 1             | 3.672                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| New Bldg Fit Out -<br>Audio Visual / VTC<br>systems hardware                 | Α        |                       | -         | -             | -                       | 56.211    | 1             | 56.211                  | 4.898     | 1             | 4.898                   | 39.199    | 1             | 39.199                  | -         | -             | -                       | 39.199    | 1             | 39.1                    |
| New Bldg Fit Out<br>- Mission Systems<br>hardware                            | Α        |                       | -         | -             | -                       | 10.023    | 1             | 10.023                  | 1.650     | 1             | 1.650                   | 0.350     | 1             | 0.350                   | -         | -             | -                       | 0.350     | 1             | 0.3                     |
| New Bldg Fit Out -<br>Technical Control<br>Facility hardware /<br>Relocation | Α        |                       | -         | -             | -                       | 9.124     | 1             | 9.124                   | 0.718     | 1             | 0.718                   | 3.000     | 1             | 3.000                   | -         | -             | 0.000                   | 3.000     | 1             | 3.0                     |
| ubtotal: Uncategorized   |          |                       | -         | -             | -                       | -         | -             | 278.291                 | -         | -             | 31.189                  | -         | -             | 57.511                  | -         | -             | 0.000                   | -         | -             | 57.5                    |
| otal   |          |                       | -         | _             | -                       | _         | -             | 278.291                 | -         | _             | 31.189                  | -         | -             | 57.511                  | -         | -             | 0.000                   | -         | _             | 57.5                    |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks

Beginning in FY18 the NPES Legacy procurement portfolio has moved out of PE 0303255F to PE 0301112F under the Air Force Life Cycle Management Command (AFLCMC)

C2 Facility Fit-Out is broken down into 9 Major Categories:

Fiber Ring, Transition Infrastructure, Premise Wiring, Electronic Security Systems, Network / Communications Systems, Server / Client / Data Systems, Audio Visual / Video Teleconferencing Systems, Missions Systems, Technical Control Facility.

There are thousands of parts and pieces to satisfy requirements...for example:

Fiber Ring: Copper Cable (miles), Fiber Optic Cable (miles)

Premise Wiring: Equipment racks (2000+), Fiber Optic Cable (miles), CAT-6A Cable (miles), MUTOAs (6000+), Patch Cabling (thousands)

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P-1 Line #21

Volume 1 - 161

| Exhibit P-40a, Budget Item Justification For Aggregated  | Items: FY 2018 Air Force  | <b>Date</b> : May 2017   |
|--|---|--|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3  | P-1 Line Item Number / Title:<br>833140 / Strategic Command And Control         | Aggregated Items Title: Command, Control, Communication, and Computers (C4) - STRATCOM |
| Network/Communications: Crypto Gear, Storage Chassis, IA Devices, Additional Cab<br>Blade Server Enclosures, Mutli-Control Units (MCUs), VoIP Instruments, Call Manage | oling, Servers, Licensing, Access Layer Switches, Network Management Softwarers | e, Intrusion Prevention Systems, Proxy System, Log Reduction Systems,                  |
| Server/Client/Data Hardware: Client Machines, Printers, Devices, End-user Licensing  | g, Additional Storage, Additional Server Blades, Cabling, Connectors            |  |
| Audio Visual/VTC Hardware: AV/VTC Bridges, Audio/Video Switching   |   |  |
| Mission Systems Hardware: Servers, Storage Devices, Client Machines, Guards, Fire  | ewalls, Antennas, Bridges, Gateways, Gatekeepers, Border Controller             |  |
| Tech Control Facility Relocation: Circuits, Cabling, Specialized Racks, Patch Fields   |   |  |
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P-1 Line #21

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833160 / Cheyenne Mountain Complex

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0305903F. 0305906F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

| D  | Prior        | EV 0040          | EV 0047           | FY 2018          | FY 2018          | FY 2018        | EV 0040         | EV 0000       | EV 0004 | EV 0000 | То       | <b>T</b> -4-1 |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total         |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -             |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 36.186           | 24.618            | 9.864            | 0.000            | 9.864          | 10.042          | 10.221        | 10.404  | 10.591  | -        | 111.926       |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -             |
| Net Procurement (P-1) (\$ in Millions)         | -            | 36.186           | 24.618            | 9.864            | 0.000            | 9.864          | 10.042          | 10.221        | 10.404  | 10.591  | -        | 111.926       |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -             |
| Total Obligation Authority (\$ in Millions)    | -            | 36.186           | 24.618            | 9.864            | 0.000            | 9.864          | 10.042          | 10.221        | 10.404  | 10.591  | -        | 111.926       |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) | •       |         | <u>'</u> |               |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -             |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -             |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | _             |

#### **Description:**

Cheyenne Mountain Complex (CMC) systems provide real-time ballistic missile warning, air defense, force management, battle management and command, control and communications for the North American Air Defense (NORAD) missions.

PE 0305903F - COCOM MOBILE CONSOLIDATED COMMAND CENTERS (MCCC)

Modification for the COMBATANT COMMANDER (COCOM), MOBILE CONSOLIDATED COMMAND CENTER (MCCC): The COCOM's MCCC provides continuity of command capabilities to accomplish directed missions in the event primary command and control facilities are incapacitated. It provides a survivable and endurable command, control, communications, computers, and intelligence (C4I) capability accomplishing directed COCOM missions. The MCCC provides C4I for Homeland Support/Homeland Defense HLS/HLD) and U.S. Northern Command (USNORTHCOM).

PE 0305906F - NCMC - ITW/AA SYSTEM

Modification for NORAD CHEYENNE MOUNTAIN COMPLEX-INTEGRATED TACTICAL WARNING/ATTACK ASSESSMENT(NCMC-ITW/AA) SYSTEMS: These systems integrate and correlate missile launch, space object orbit, and air surveillance information to assess the nature of an enemy attack and issue warnings to the President of the United States, the Prime Minister of Canada, United States Secretary of Defense and warfighting Combatant Commanders (C2). Funding procures replacement for reliability and maintainability of the information systems hardware and associated systems software for Cheyenne Mountain operating locations to include legacy space defense systems at Vandenberg AFB, CA and remote interfacing sites essential for executing US Strategic Command, NORAD, Joint Force Component Commander (JFCC) space missions exercised in the Cheyenne Mountain Complex (CMC), Joint Space Program Operations Center (JSpOC), and forward operating locations.

#### Justification:

PE 0305903F - COCOM MOBILE CONSOLIDATED COMMAND CENTERS (MCCC)

The COCOM's MCCC provides a survivable and endurable command, control, communications, computers, intelligence (C4I), reliability and maintainability while accomplishing directed COCOM missions.

The MCCC provides C4I for Homeland Security Support/Homeland Defense (HLS/HLD) and USNORTHCOM missions. MCCC modification efforts funded in this line include upgrading MCCC shelters and incorporating additional C4I system capabilities via mobile Information Technology and Communication Upgrade projects; ensuring the platform's ability to rapidly deploy, re-constitute and operate. In FY18, this

LI 833160 - Cheyenne Mountain Complex Air Force

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P-1 Line #22

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

Equip / BSA 3: Electronics Programs

833160 / Cheyenne Mountain Complex

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0305903F, 0305906F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

line will fund the MCCC Block 01 modifications which include but are not limited to: 1) Communication system upgrade; 2) Mission and support shelters upgrade; 3) Cyber security modernization, 4) Network upgrades; and 5) Environmental and Filtration system upgrade along with and including initial spares and test facility updates required by the fielding of these modification. Due to the limited spares demand rates, and indefinite system lifespan. Life of Type buys may be required to support weapons system modifications across the active MCCC Block Programs. Additionally, FY18 funding will support Program Management Administration (PMA) support for the MCCC Block 00 Program initiated in FY17, the MCCC Block 01 program initiated with FY18 funding, and finally the planning efforts for the MCCC Block 02 program. PMA includes acquisition support/strategy, engineering and technical expertise associated with procurement, support services, test, travel and other program related costs associated with install of procurement equipment. Funding for this effort is in program element 0305903F and is funded IAW full funding policy.

PF 0305906F - NCMC - ITW/AA SYSTEM

Funding procures replacement for reliability and maintainability of the information systems hardware and associated systems software for NCMC/ITW/AA system. This system is a C2 enterprise of various critical information technology systems comprised of communications processors, network devices, C2 services, workstations, databases, and intelligence sources that are integrated to provide the means to assess an enemy attack. In FY18, this line will fund NCMC-ITW/AA Block 01 modifications, which include but are not limited to the two major components: 1) Mission systems (air, missile, and space) upgrades include all subsystems within the sensor-to-operator messaging string message-processing, database, communications processing systems, C2 services, mission operations management systems, and workstations. 2). Network/infrastructure systems for ITW/AA and Space include but are not limited to those sub-systems that provide the fabric for the mission systems to operate within operational and security parameters such as system operations servers, security servers, backup systems, networks and network infrastructure components, support systems software and independent test systems. Additionally, FY18 funding will support continuation of Program Management Administration (PMA) support for the NCMC-ITW/AA Block 00 program in FY17, the NCMC-ITW/AA Block 01 program initiated with FY18 funding and finally the planning efforts for the NCMC-ITW/AA Block 02 program. PMA includes acquisition support/strategy, engineering and technical expertise associated with procurement, support services, test, travel and other program related costs associated with install of procurement equipment. Funding for this effort is in program element 0C030906F and is funded IAW full funding policy.

**Exhibit P-40, Budget Line Item Justification:** FY 2018 Air Force **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833170 / Mission Planning Systems

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0208006F

Line Item MDAP/MAIS Code: N/A

|   | Prior        |                  |                   | FY 2018          | FY 2018         | FY 2018        |                 |               |         |         | То       |         |
|---|--------------|------------------|-------------------|------------------|-----------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| <b>Resource Summary</b>                       | Years        | FY 2016          | FY 2017           | Base             | ОСО             | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -            | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 14.456           | 15.868            | 15.486           | 0.000           | 15.486         | 15.752          | 16.031        | 16.321  | 16.617  | -        | 110.531 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -            | 14.456           | 15.868            | 15.486           | 0.000           | 15.486         | 15.752          | 16.031        | 16.321  | 16.617  | -        | 110.531 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -            | 14.456           | 15.868            | 15.486           | 0.000           | 15.486         | 15.752          | 16.031        | 16.321  | 16.617  | -        | 110.531 |
| (The following                                | Resource Sum | mary rows are fo | r informational p | urposes only. Th | e corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)               | -            | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |

#### **Description:**

The Mission Planning Systems (MPS) Hardware program procures commercial-off-the-shelf (COTS) computing systems hardware and hardware-related requirements for Air Force active duty, Guard, and Reserve units worldwide. These computing systems provide a flexible, configurable and cost-effective range of increasing capability to meet the continuum of peacetime, contingency and wartime planning requirements. These electronic systems provide a mission data management system that efficiently interfaces with other planning systems as well as aircraft avionics. These computing systems are procured on a four-year life cycle replacement to effectively address and/or alleviate Diminishing Manufacturing Sources (DMS) issues. Once procured the systems are centrally managed for all applicable AF platforms and their operational users, including Guard and Reserve Forces.

The program continues the procurement of COTS computing hardware and other devices associated with the Mission Planning Systems program. It also continues the procurement of all capital replacement hardware used in conjunction with MPS and other pre-, post-, and in-flight mission planning software. Together this hardware and associated software enables aircrews and other planners to plan the safest, most effective operational missions in a timely manner.

The program procures COTS based Personal Computing (PC) Systems to include (but are not limited to) desktop computers, laptops, personal digital assistants (PDA), tablet PCs, color printers, storage devices, displays, other peripherals, software and software licenses, and other support services, that together, allow the user to produce the necessary charts and other mission-specific products required to effectively perform a variety of military missions.

A variety of information technology, navigation and communications hardware and software packages will also be procured each year to meet the varied needs of mission planning platforms and training units. This PC-based capability, when integrated with corresponding mission planning software releases, provides a portable, tailorable, net-centric system for aircrews to complete the mission planning function. The procured items also enable aircrews to effectively utilize software that has been modified to stay in sync with new capabilities incorporated into select platforms via their Operational Flight Program (OFP) update process. They also provide a mission planning capability for precision/autonomous guided munitions and can also be networked with other Theater Battle Management (TBM) systems to further tailor a platform's mission planning environment.

The MPS procurement strategy leverages the rapid increase in PC-based technology to enable high-end computing on increasingly smaller and more mission-oriented devices. The programs procure UNIX and PC-based systems that provide flexible, configurable, and cost effective solutions that increase tactical and strategic capabilities to meet the continuum of operations ranging from peacetime contingencies to conventional and nuclear wartime mission planning requirements. Each segment of the program has shifted its hardware emphasis from a limited number of large, complex planning systems to more compact and personal planning devices that can be tailored to satisfy user needs. This adjustment is a practical and efficient way to meet technology-driven challenges such as the evolutionary nature of mission planning

LI 833170 - Mission Planning Systems Air Force UNCLASSIFIED
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P-1 Line #23

Volume 1 - 165

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 833170 / Mission Planning Systems

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0208006F

Line Item MDAP/MAIS Code: N/A

(that necessitates recurrent hardware changes to meet overall system requirements) and advances in COTS technology that makes available new capabilities (which may lower component costs or address component obsolescence). It is also a more effective way to address changes in the number, type, and deployment of aircraft/weapons that force changes in the number of UNIX and PC-based mission planning computers and their concept of operations.

- 1. MISSION PLANNING SYSTEMS (MPS) HARDWARE: This acquisition is a continuation of procurement efforts to provide MPS-related hardware for Air Force platforms. The program will provide a suite of COTS-based mission planning hardware and software systems that can be integrated with USAF Command, Control, Communications, Computers, and Intelligence (C4I) systems for the operation of USAF aircraft (e.g. F-22, B-1, F-16, F-15, RC/OC-135, E-3, E-4, E-8, C-130, HC-130, EC-130, HH-60, KC-135, KC-46, C-5, KC-10, C-17, A-10, F-35, Global Hawk, U-2, B-52, B-2, UH-1, T-38) and the support of USAF training requirements. MPS allows aircrews to electronically receive tasking orders, intelligence information, target coordinates, imagery and other information. This information is then used to organize and prepare flight (including equipment and personnel airdrop) and weapons delivery planning data (e.g., maps, charts, imagery, flight logs, radar predications, and navigation databases) that is electronically transferred to aircraft and/or precision-quided weapons. MPS increases the combat effectiveness of Air Force aerial assets (including unmanned air vehicles, conventional and low-observable aircraft, and weapons) and Army guided delivery systems by supporting the use of sophisticated avionics and precision/autonomous guided munitions. It helps to increase wartime sortie rates while improving aircrew and aircraft survivability and aircrew readiness.
- 2. PRECISION AERIAL DELIVERY SYSTEM (PADS): PADS provides the capability for direct delivery of cargo and equipment through high altitude, precision airdrops (principally with C-17 and C-130 aircraft). Currently it consists of the Joint Precision Airdrop System (JPADS) acquisition effort. JPADS is a collaborative effort with the Army, USMC, and other agencies to provide aviators the ability to accurately airdrop payloads (including supplies/equipment and personnel) to units in the field from altitudes beyond the reach of some surface-to-air weaponry. This portion of the program procures COTS-based computing hardware, support services and aerial delivery systems to enable completion of pre and in-flight mission planning functions as well as aerial delivery proficiency training in and with operational units.

Market surveys and analysis of COTS products will be used to support procurement decisions. Funding for this exhibit is in Program Element (PE) 0208006F.

This funding request will support potential DMS and obsolescence solutions, to include if optimal, life of type buys or bridge buys limited to the program of record quantity.

#### Justification:

FY18 funding will continue procurement of a variety of computers, software, and electronic equipment to support pre-, post-, and in-flight mission planning tasks for a number of Air Force platforms. Procured hardware and other items will support and enable completion of mission planning efforts using legacy planning tools (e.g. Unix-MPS and the Portable Flight Planning Software (PFPS)) as well as the Joint Mission Planning Systems (JMPS). The hardware will also accommodate planning system updates based upon new capability incorporation via individual platform Operational Flight Programs (OFPs). All items are centrally managed and distributed by the MPS System Support Facility. The following kinds of equipment and mission areas will be supported:

1. MPS HARDWARE: FY18 funding will continue procurement of COTS-based hardware, software, and support services to include (but is not limited to) desktop computers, laptops, tablet PCs, data storage devices, PDAs, monitors, software applications, warranties, and other electronic computing components. These assets provide a portable, tailorable, network-capable system that can be integrated with MPS software to provide basic mission planning capability and full interoperability with TBM systems. Components can also be networked with legacy UNIX Systems to further tailor a platform's mission planning environment. The program will procure hardware and software items, warranties, other services, and up to a 15% contingency inventory (based on the overall number of items being procured) for the following mission planning operational users:

Air Combat Command (ACC): F-15, F-15 C, F-16 Block 15/25/30/40/50, F-22, F-35, E-3, E-4, E-8, RC-135, HH-60, HC-130, EC-130, U-2, Global Hawk

Air Mobility Command (AMC): C-5, C-17, C-130, KC-10, KC-135, KC-46

Air Force Global Strike Command (AFGSC): B-2, B-52, B-1, UH-1

Air Education and Training Command (AETC): T-38

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| Exhibit P-40, Budget Line Item Justification: FY 2018  | 3 Air Force   |  | <b>Date:</b> May 2017  |  |  |  |  |  |
| Appropriation / Budget Activity / Budget Sub Activity 3080F: Other Procurement, Air Force / BA 03: Electronic Equip / BSA 3: Electronics Programs  | •   | P-1 Line Item Number / Title:<br>833170 / Mission Planning Systems |  |  |  |  |  |  |
| D Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It  | ems: N/A   | Other Related Program Elements: 0208006F   |  |  |  |  |  |
| Line Item MDAP/MAIS Code: N/A  |   |  |  |  |  |  |  |  |
| Funding for this effort is in program element 0208006F.  |   |  |  |  |  |  |  |  |
| checkout (i.e. Automatic Test Equipment or ATE) and other related ite [including solid state and pressure sealed disk drives]; precision-guide warranties. Funding for this effort is in program element 0208006F. | ems. Components include, but are reded airdrop training systems; portable | not limited to: guided<br>e data storage units, e                  | o Systems (JPADS) hardware, software, LRU support equipment for functional d delivery vehicles (e.g. ultralight, 2K, 10K); Pressure Tolerant Disk Drives (PTDD) engineering/technical support, equipment storage and associated hardware |  |  |  |  |  |
| <ol><li>PROGRAM MANAGEMENT ADMINISTRATION: FY18 funding pro<br/>(JPADS) procurement program.</li></ol>   | ovides program office, engineering, a                                     | and other contractor s   | support for the Mission Planning Systems (MPS) and Joint Precision Airdrop Systems   |  |  |  |  |  |
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LI 833170 - Mission Planning Systems Air Force



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833440 / Drug Interdiction Spt

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready, B=Not Service Ready): A

Appropriation / Budget Activity / Budget Sub Activity:

Program Elements for Code B Items: N/A

Other Related Program Elements: 0201110F

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                    | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |       |
|--|--------------|------------------|--------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|-------|
| Resource Summary                               | Years        | FY 2016          | FY 2017            | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total |
| Procurement Quantity (Units in Each)           | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 9.797            | 0.000              | 0.000            | 0.000            | 0.000          | 0.000           | 0.000          | 0.000   | 0.000   | -        | 9.797 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Net Procurement (P-1) (\$ in Millions)         | -            | 9.797            | 0.000              | 0.000            | 0.000            | 0.000          | 0.000           | 0.000          | 0.000   | 0.000   | -        | 9.797 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Total Obligation Authority (\$ in Millions)    | -            | 9.797            | 0.000              | 0.000            | 0.000            | 0.000          | 0.000           | 0.000          | 0.000   | 0.000   | -        | 9.797 |
| (The following                                 | Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) |         |         |          |       |
| Initial Spares (\$ in Millions)                | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |

# **Description:**

Funding supports drug interdiction and counter-drug activities.

Funding for this exhibit contained in PE 0201110F.

#### Justification:

No FY18 funds requested.

LI 833440 - Drug Interdiction Spt Air Force

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P-1 Line #24

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

833560 / Integrated Strat Plan & Analy Network (ISPAN)

Equip / BSA 3: Electronics Programs

ID Code (A=Service Ready. B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |        |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|--------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 9.597            | 9.331             | 9.187            | 0.000            | 9.187          | 9.068           | 9.228         | 9.395   | 9.563   | -        | 65.369 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | -            | 9.597            | 9.331             | 9.187            | 0.000            | 9.187          | 9.068           | 9.228         | 9.395   | 9.563   | -        | 65.369 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | -            | 9.597            | 9.331             | 9.187            | 0.000            | 9.187          | 9.068           | 9.228         | 9.395   | 9.563   | -        | 65.369 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         | ĺ        | •      |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |

#### **Description:**

INTEGRATED STRATEGIC PLANNING AND ANALYSIS NETWORK (ISPAN): The mission of USSTRATCOM is to conduct global operations in coordination with other Combatant Commands, Services, and appropriate U.S. Government agencies to deter and detect strategic attacks against the U.S. and its allies. It provides full-spectrum global strike, and coordinated space, missile defense, and information operations capabilities to meet both deterrent and decisive national security objectives. USSTRATCOM will also provide operational space support, integrated missile defense, global command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), and specialized planning expertise to the joint warfighter. ISPAN enables USSTRATCOM to carry out these missions. It is one of DoD's most complex classified computer systems and the only national force level planning system.

ISPAN enables an effects-based approach to planning and operations; cross domain information sharing; and serves multiple planning environments. It develops, verifies, and produces Operational Plan (OPLAN) 8010. It also supports the USSTRATCOM family of plans construct and current Concept of Operations. The system performs tasks ranging from creating and running Courses of Action (COAs) on threat scenarios to providing data for developing bomber aircraft crew strike mission data in digital and hard copy formats. It includes automated data processing equipment (ADPE), multiple networks, unique processes and procedures, software, training, associated deployable and distributed data processing nodes, a test/development environment, and subsidiary systems. The system will migrate to the new USSTRATCOM Command and Control Facility.

The ISPAN program is comprised of two independent but complementary planning systems; the Mission Planning and Analysis System (MPAS) and the Global Adaptive Planning Collaborative Information Environment (GAP-CIE).

MPAS is an automated information system to support Global Strike nuclear and conventional target development and weaponeering. MPAS includes Mission Planning, Analysis, and Decision Support tools and an Enterprise Database to sustain and support nuclear and conventional strategic war planning.

GAP-CIE provides web-enabled adaptive planning, rapid distributed Course of Action (COA) development and global situational awareness supporting both contingency and crisis planners.

ISPAN uses a four-year life-cycle replacement plan to procure required Commercial Off-The-Shelf (COTS) hardware (e.g. servers, storage devices, workstations, peripherals and other network components).

In some instances the hardware must be combined with commercially available software to form unique planning environments. The programs life cycle replacement plan for hardware follows industry standards and is used to eliminate the peaks and valleys associated with maintaining compatibility with the fast moving COTS hardware technology improvement cycle. It also allows the program to better utilize existing

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|---|--|---|--|-----------|--|--|--|--|--|--|--|
| Exhibit P-40, Budget Line Item Justification: FY 2018   | 8 Air Force  | <b>Date</b> : May 2017  |  |           |  |  |  |  |  |  |  |
| Appropriation / Budget Activity / Budget Sub Activit 3080F: Other Procurement, Air Force / BA 03: Electronic Equip / BSA 3: Electronics Programs  | <del>-</del>   | P-1 Line Item Number / Title:<br>833560 / Integrated Strat Plan & Analy Network (ISPAN)   |  |           |  |  |  |  |  |  |  |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It   | ems: N/A  | Other Related Program Elements: N/A  |           |  |  |  |  |  |  |  |
| Line Item MDAP/MAIS Code: N/A   |  |   |  |           |  |  |  |  |  |  |  |
| manpower to install and configure the hardware systems to provide a within the program is used to support all ISPAN program increments.  Funding for this exhibit is contained in Program Element 0101313F.   |  | nent of critical infrastructure   | components as they become obsolete. Hardware and software procured   |           |  |  |  |  |  |  |  |
| and the Global Adaptive Planning Collaborative Information Environn based hardware and software for an operational capability lab environ automated data transfers between multi-level networks supporting plastorage area network (SAN), backup and recovery systems, guard so | nent (GAP CIE) efforts. Funding pro<br>nment to certify ISPAN applications<br>anners worldwide on multiple enclav<br>plution software and other articles the<br>for sites. Funding also provides for p | cures mission system infras<br>for operational use. Funding<br>es. It allows for the procurer<br>at will provide a secure Cros<br>procurement of virtualization | system which consists of the Mission Planning and Analysis System (MPAS structure, architecture, and related support components. This includes COT g also provides a secure cross-domain security solution capability to enable ment of items such as (but are not limited to) application servers, switches, so Domain Security Solution (CDSS) capability, and the life-cycle replaceme technology environments and distributed operations capability to support journ to the new USSTRATCOM Command and Control Facility. | S-<br>ent |  |  |  |  |  |  |  |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force **Date:** May 2017

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834010 / General Information Technology

Equip / BSA 4: Spcl Comm-Electronics Projects

Other Related Program Elements: 0207697F, 0208087F. 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F,

0901279F, 0901299F, 1203173F, 1203174F

ID Code (A=Service Ready, B=Not Service Ready): A

| Line Item MDAP/MAIS Code: CAMI                 |                |                  |                   |                  |                 |                  |                       |                       |                       |                       |                |                        |
|--|----------------|------------------|-------------------|------------------|-----------------|------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|------------------------|
| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO  | FY 2018<br>Total | FY 2019               | FY 2020               | FY 2021               | FY 2022               | To<br>Complete | Total                  |
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -               | -                | -                     | -                     | -                     | -                     | -              | -                      |
| Gross/Weapon System Cost (\$ in Millions)      | 0.000          | 31.952           | 41.779            | 51.826           | 0.000           | 51.826           | 49.231 <sup>(a)</sup> | 41.179 <sup>(b)</sup> | 39.567 <sup>(c)</sup> | 38.505 <sup>(d)</sup> | -              | 294.039 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -               | -                | -                     | -                     | -                     | -                     | -              | -                      |
| Net Procurement (P-1) (\$ in Millions)         | 0.000          | 31.952           | 41.779            | 51.826           | 0.000           | 51.826           | 49.231                | 41.179                | 39.567                | 38.505                | -              | 294.039                |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -               | -                | -                     | -                     | -                     | -                     | -              | -                      |
| Total Obligation Authority (\$ in Millions)    | 0.000          | 31.952           | 41.779            | 51.826           | 0.000           | 51.826           | 49.231                | 41.179                | 39.567                | 38.505                | -              | 294.039                |
| (The following                                 | g Resource Sum | mary rows are fo | r informational p | urposes only. Th | e corresponding | budget requests  | s are documente       | ed elsewhere.)        |                       |                       |                |                        |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -               | -                | -                     | -                     | -                     | -                     | -              | -                      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -               | -                | -                     | -                     | -                     | -                     | -              | -                      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -               | -                | -                     | -                     | -                     | -                     | -              | -                      |

### Description:

PE 0201130F US Northern Command Communications - P-40A

- a. NORAD AND NORTHCOM INTEROPERABLE COMMUNICATIONS: This includes mission specific communications enhancements to support extension of Public Switched Telephone Network (PSTN) and Public Internet to Civil Authorities from the DOD Satellite Teleports either directly to the Civil Authorities' communications systems or through DOD communications systems. This program combines the Interoperable Communications and Joint Tactical Radio System (JTRS) compliant radio handsets to enable the Defense Support of Civil Authorities mission.
- b. DEPLOYABLE COMMUNICATION CAPABILITY SYSTEM LIFE CYCLE MANAGEMENT: The USNORTHCOM Deployable Communication Fleet consists of Emergency Response Vehicles (ERVs) Mobile Communications Platforms (MCPs), Rapid Response Kits (RRK) and fly-away communications systems, small enough to be flown on commercial airlines to a nationally declared disaster. (NC J6 DCCS combined the previously approved and funded Cellular System Technical Refresh and Emergency Response Communications System into one consolidated effort)
- c. EARLY WARNING RADAR (EWR) COMMMUNICATIONS EQUIPMENT: The AVTEC NexGen panels are used to support the Hawaii Regional Air Operations Center (HIRAOC). The NORAD EWR Communications Equipment provide equipment to facilitate dual operation cutovers, secure/non-secure communications for a single communications network allowing clear and secure, real-time, line of sight and beyond line of sight NORAD wide command and control of airborne and ground elements.

PE 0207277F 0207277F Eagle Vision - P-40A

Family of systems providing high impact, quick reaction capabilities to warfighters for mission planning, rehearsal, visualization, and intelligence gathering purposes. Program components include: Eagle Vision, DoD's only worldwide deployable commercial imagery ground station capability, and ISR innovations, rapid prototyping, operational evaluation and fielding of short notice, high payoff capabilities addressing immediate caps and/or shortfalls identified by warfighting activities. Eagle Vision provides direct downlink commercial imagery to operational commanders for mission support purposes.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the armed forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

PE 0207448F C2ISR Tactical Data Link - P-40A

| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 | Date: May 2017                          |  |
|---|---|--|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title:           |  |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834010 / General Information Technology |  |
| Equip / BSA 4: SpcI Comm-Electronics Projects                                   |   |  |

| ID Code (A=Service Ready, B=Not Service Ready): A | Program Elements for Code B Items: N/A | Other Related Program Elements: 0207697F, 0208087F,         |
|---|--|---|
|   |  | 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, |
|   |  | 0901279F, 0901299F, 1203173F, 1203174F                      |

#### Line Item MDAP/MAIS Code: CAMI

Assistant Secretary of Defense, Command, Control, Communications, and Intelligence (ASD/C3I) directed implementation of the DoD Cryptographic Modernization Initiative (CMI) on 23 February 2001. Chairman, Joint Chiefs of Staff (CJCS) Notice 6510/NSA 3-9 directs the modernization of all cryptography in military systems in the US, NATO and Coalition nations. To prevent information compromise, the National Security Agency (NSA) mandate requires Link 16 cryptographic systems be upgraded. The CJCS directed a modernization effort at the recommendation of the NSA to modernize equipment and provide enhanced security for Link 16 tactical networks (Cryptographic Modernization Initiative (CMI)). Likewise, a radio frequency spectrum memorandum of agreement between the DoD and the Department of Transportation mandated the internal frequency remapping of our Link 16 family of terminals to avoid conflict with next generation Federal Aviation Administration (FAA) radio aids to navigation. These two mandates, among other operational reliability and capability improvements, will be satisfied under a Block Upgrade (BU2) effort planned for the Link 16 Multifunctional Information Distribution System (MIDS) Low Volume Terminal (LVT). BU2 will procure new Signal Message Processor (SMP) cards which incorporates the current NSA-mandated cryptographic standards. BU2 will also procure a new Tailored Processor/Ground Multiplexer card, update software and firmware in the MIDS LVT to improve operational reliability and provide the radio the ability to remap the lower frequency range of the terminal. The new cards will be installed in all terminals and spare cards will also be purchased. All together, BU2 will procure a retrofit kit which includes the SMP cards, Tailored Processor/Ground Multiplexer card, and updated software and firmware.

### PE 0207603F Combat Air Forces (CAF) Exercises and Readiness Training - P-40A

Procures part task trainers for ACC and other CAF air crews to perform selected ground training tasks in conjunction with other air operations training activities as they train to become combat ready for worldwide air expeditionary force missions.

### PE 0207605F Wargaming and Simulation Centers - P-40A

The Warrior Preparation Center conducts and supports integrated and distributed Live, Virtual, and Constructive (LVC) warfighter training for Joint and Combined partners in the European and African theaters.

### PE 0207697F Distributed Training and Exercises - P-40A

AIR FORCE DISTRICT WASHINGTON: Wargaming and analysis suites, hardware, and software in direct support of the wargaming informational environment, which is distributed across the National Capitol Region. United States Air Force, and Combatant Commands worldwide. Funding for this exhibit contained in PE 0207697F.

#### PE 0208087F AF OFFENSIVE CYBERSPACE OPERATIONS - P-40A

Funds procure student mission training systems (hardware, software, infrastructure, and facility modifications) supporting Information & Cyber Operations training needs of approximately 700 students per year.

### Cyberspace Force Application PEC 028087F - P-40A

Funding procures specialized hardware/software necessary for real time deployment as Cyberspace network attack tools.

#### PE 0303112F Air Force Communications (AIRCOM) - P-40A

The Airborne Networking Global Information Grid (GIG) Interface (ANGI) provides a consolidated ground entry point for airborne communications network connectivity between the terrestrial and space layers. It supports Air Force and Joint efforts for integration of airborne, terrestrial and space layer networks. This initiative establishes ANGI sites that support deployed assets by extending the AFNet to the aerial layer.

#### PE 0305128F Security and Investigative Activities - P-40A

The Air Force Office of Special Investigation (AFOSI) Directorate of Warfighting Integration is responsible for the delivery of Information Technology (IT) services, both unclassified and classified, to over 250 locations, world-wide. The directorate also has the responsibility for continually identifying and implementing advanced applications, tools and IT technology that improve AFOSI's ability to manage investigative activity for Air Force leaders. It accomplishes this mission through the management and oversight of personnel, products and systems associated with unclassified, Secret, special access, law enforcement sensitive (LES) and Top Secret/SCI computers and information systems, long-haul, communications circuits, official records, Privacy Act, Freedom of Information Act, publication and forms, and official mail to achieve the command's operational objectives in support of the AF and Office of the Secretary of Defense as well as to achieve Executive mandates to improve information sharing within and between the law enforcement and intelligence communities.

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 | Date: May 2017                          |  |
|---|---|--|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title:           |  |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834010 / General Information Technology |  |
| Equip / BSA 4: SpcI Comm-Electronics Projects                                   |   |  |

| ID Code (A=Service Ready, B=Not Service Ready): A | Program Elements for Code B Items: N/A | Other Related Program Elements: 0207697F, 0208087F,         |
|---|--|---|
|   |  | 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, |
|   |  | 0901279F, 0901299F, 1203173F, 1203174F                      |

#### Line Item MDAP/MAIS Code: CAMI

PE 0305173F Space and Missile Test and Evaluation Center - P-40A

The Research and Development Space and Missile Operations (RDSMO) program, executed by the Advanced Systems and Development Directorate at Kirtland AFB, NM, conducts space and missile Research and Developmental Test and Evaluation (RDT&E) and Initial Operational Test and Evaluation (IOT&E) in support of experimental, demonstration, and operational satellites. The program develops, acquires, and operates satellite command and control (C2) and fixed/deployable telemetry, tracking, and commanding (TT&C) antenna systems in support of AF and DoD missions. The RDSMO program is responsible for the design, development, integration, testing, sustainment, and operations of the Multi-Mission Satellite Operations Center (MMSOC) C2 product line installed in the RDT&E Support Complex (RSC) at Kirtland AFB, NM and Schriever AFB, CO in support of the Enterprise Ground Services initiatives.

#### PE 0305174F Space Innovation, Integration and Rapid Technology Development - P-40A

Located at Peterson AFB, Colorado, the Space Innovation, Integration and Rapid Technology Development (SIIRTD) program develops and modifies modeling and simulation tools that Air Force Space Command's Space Analysis Center uses for operations research, military utility analyses, tradeoff studies, and other evaluations of space mission areas to guide planning, programming, requirements generation, analyses of alternatives, and other activities. Development activities incorporate changes in fielded and projected space operational capabilities, as well as technical improvements, into the group's software tools to ensure their data and technology remain current. Its innovation, education, and training activities foster solutions to operational deficiencies and enhance the integration of space systems into Air Force operations, thereby enabling service and joint warfighters to realized the full potential of existing and planned space capabilities.

DISTRIBUTED COMMUNICATIONS ARCHITECTURE: This system provides a network based communications capability enabling dispersed space personnel to participate in space exercises and wargames and to assist in development, testing, and validation of SIIRTD innovation projects supporting the Combat Air Forces. It can also support limited command and control capabilities for space operations.

SPACE ANALYSIS CENTER: Air Force Space Command's Space Analysis Center uses modeling and simulation tools to conduct operations research, military utility analyses, tradeoff studies, and other evaluations of space mission areas to guide planning, programming, requirements generation, analyses of alternatives, and other activities. Related modeling and simulation tool development is funded in RDT&E, AF, PE 0305174F, Space Innovation, Integration and Rapid Technology Development.

#### PE 0604281F Tactical Data Networks Enterprise - P-40A

Tactical Data Link (TDL) enterprise efforts include equipment, fielding support, and associated contract support for the fielded Family of Gateways, as well as capability enhancements to TDLs, gateways, and AF contributions to the Joint Aerial Layer Network (JALN). These airborne networking systems enable combat forces to exchange information quickly and accurately by bridging discrete airborne, terrestrial, maritime, and space-based C4ISR networks. Tactical Data Network (TDN) Planning, Analysis and Monitoring Tactical Edge Network Command and Control (PAM/TENC2) will add capability to modernize CONUS ground-based TDL gateways.

#### PE 0708012F Logistics Support Activities - P-40A

GUNTER AIR FORCE BASE NETWORK SERVICES provide unique local area network (LAN) hardware to the population at Maxwell Air Force (MAFB)-Gunter Annex, AL including equipment for web access, file storage backup, information security, and application testing for AF programs worldwide hosted at MAFB-Gunter Annex, AL. LAN equipment enables MAFB-Gunter Annex to manage/support 122 programs and systems worldwide. MAFB-Gunter Annex exceeds the standard Base Information Transport Infrastructure (BITI) environment, therefore no funding is provided by BITI.

#### PE 0708074F Joint Logistics Program - Total Asset Visibility - P-40A

AUTOMATIC IDENTIFICATION TECHNOLOGY (AIT): A collection of enabling technologies including linear and two-dimensional bar codes, radio frequency identification, smart cards, memory cards, laser cards, touch memory, and voice and biometrics identification. These technologies provide timely and accurate automatic capture, aggregation, and transfer of data to management information systems with minimal human involvement. By capitalizing on advances in technology the Air Force is able to gain efficiencies in the logistical supply chain and asset visibility throughout an item's life cycle. Project funding enables compatibility of Air Force and industry standards in the core areas of supply, transportation, and maintenance, as well as weaving commercial AIT business practices and standards into the Air Force's logistics infrastructure.

PE 0804711F Recruit Training Units - P-40A

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force **Date:** May 2017

### Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834010 / General Information Technology

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207697F, 0208087F. 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, 0901279F, 0901299F, 1203173F, 1203174F

Line Item MDAP/MAIS Code: CAMI

ID Code (A=Service Ready, B=Not Service Ready): A

BASIC MILITARY TRAINING (BMT) SURVEILLANCE SECURITY SYSTEM: Basic Military

Training sustains the combat capability of the Air Force (Active duty, Air National Guard and Air Force Reserve Command) with trained airmen. MTI Misconduct-Restore The Trust /Requirements associated with MTI misconduct issues at BMT. Due to the sexual misconduct by MTIs at BMT, AETC/CC directed a Commander Directed Investigation (CDI) to identify issues that place Airmen at risk in their training environment. SECAF/CSAF support findings and recommended actions to "Eliminate Detection Weakness". This effort continues the purchase, installation, and integration of a surveillance system covering common areas of the BMT facilities at JBSA-Lackland AFB for the deterrence and prosecution of misconduct. It includes hardware, system engineering/test and evaluation, site survey, infrastructure installation and support. Detailed requirements include: network switch, network storage device/upgrade package, computer monitor, site license, channel expansion license, hard drive, uninterruptable power supply, extended battery, digital monitor, cameras, and camera communication cable

#### PE 0804721F Service Academies - P-40A

AIR FORCE ACADEMY COMPUTER SUPPORT: Air Force Academy uses two separate networks for day-to-day operations. Approximately 75% of the support is provided to USAFAEDU (academic network), providing the Academy's interface for mission elements, the cadet wing, direct reporting unit (DRU) and direct mission support organizations to DoD/AF military sites, commercial internet, other colleges and universities. The remaining support is provided to USAFAMIL, the interface with the AF's military only networks (NIPRNET and SIPRNET).

#### PE 0804731F General Skill Training - P-40A

GENERAL SKILL TRAINING: General Skills Training supports initial, advanced and supplemental training associated with all Air Force career fields taught or managed under Goodfellow, Keesler, Vandenberg, Sheppard, Lackland, and Fort Sam. This includes classroom and field training operations, management systems for students and faculty, and other requirements directly supporting Technical Training Groups, detachments, and various operating locations.

TECHNICAL TRAINING MANAGEMENT SYSTEM (TTMS): TTMS provides AETC personnel and other users a suite of integrated and customized Commercial Off-The-Shelf (COTS)/Government Off-The-Shelf (GOTS) software products implemented in a centralized, enterprise-wide, web-based architecture for the development and administration of basic military and technical training. TTMS supports nine functions: student management, course design and development (for AETC and METC), student evaluation, statistical analysis and reporting, surveys, assessments and testing. Airman Interactive Management System (AIMS) for MTLs. Job Match/Seat Bank, and TTMS BMT for student processing.

#### PE 0804751F Professional Military Education - P-40A

Air University (AU) Education Technology (ET) Program funds the cradle-to-grave lifecycle management of IT systems, services, and resources that comprise AU Enterprise ET/IT portfolio. The primary systems under AU IT are CDSAR. STARS. AUSIS. AUSRIS. AUREPM, and AUSMS. This portfolio provides enrollment, content delivery, and student administration capabilities critical to all AU resident and non-resident courses. At the Air Force level, A6 provides the system of record capability for all AF PME/PCE; a system crucial to ensuring a fully prepared (trained and educated) expeditionary force. As AU aggressively pursues the enhancement of processes by which educational products are delivered to students. ET/IT demands will increase in frequency and complexity. Quickly revising software and inserting technology into those processes in a timeframe adequate to realize return on investment dollars or educational benefits requires an appropriately resourced A6 organization.

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 | Date: May 2017                          |  |
|---|---|--|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title:           |  |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834010 / General Information Technology |  |
| Equip / BSA 4: Spcl Comm-Electronics Projects                                   |   |  |

| ID Code (A=Service Ready, B=Not Service Ready): A | Program Elements for Code B Items: N/A | Other Related Program Elements: 0207697F, 0208087F,         |
|---|--|---|
|   |  | 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, |
|   |  | 0901279F, 0901299F, 1203173F, 1203174F                      |

#### Line Item MDAP/MAIS Code: CAMI

PE 0804752F Other Professional Education - P-40A

Accreditation of AFIT's engineering programs is directly related to both the existence of the well-equipped and maintained laboratories and an institutional commitment to fund equipment and maintenance. To serve the research needs of the USAF/DoD, students have up-to-date equipment to make tangible contributions to AF research needs. Existing equipment has reached the age where the cost to maintain it is impractical.

#### PE 0804771F Support of the Training Establishment - P-40A

Air University (AU) Education Technology (ET) Program funds the cradle-to-grave lifecycle management of IT systems, services, and resources that comprise AU Enterprise ET/IT portfolio. The primary systems under AU IT are CDSAR, STARS, AUSIS, AUSRIS, AUREPM, and AUSMS. This portfolio provides enrollment, content delivery, and student administration capabilities critical to all AU resident and non-resident courses. At the Air Force level, A6 provides the system of record capability for all AF PME/PCE; a system crucial to ensuring a fully prepared (trained and educated) expeditionary force. As AU aggressively pursues the enhancement of processes by which educational products are delivered to students, ET/IT demands will increase in frequency and complexity. Quickly revising software and inserting technology into those processes in a timeframe adequate to realize return on investment dollars or educational benefits requires an appropriately resourced A6 organization.

#### PE 0901279F Facilities Operation - Administrative - P-40A

CIVIL ENGINEER'S (CE) IT TRANSFORMATION: CE IT Transformation program's mission is to transform CE's business processes to better serve the CE customers and meet AF Transformational Goals. The plan is to leverage industry best practices, optimize core business processes, and replace existing outdated IT capabilities with a set of commercial off-the-shelf (COTS) software solutions and a service provider to deploy and maintain the system. This COTS solution will provide a robust, enterprise-wide CE capability and will consist of an integrated set of embedded / configurable best business practices and capabilities to support the following CE missions: Real Property Management; Work & Supply Management, Project Management, Energy Management, Financial Management, Environmental Management, Planning, Emergency Services, Fire Operations and EOD.

#### PE 0901299F AF A1 Systems - P-40A

Provides funding for the sustainment and operation of hardware and software supporting Total Force Human Capital IT systems (RegAF, Reserve, ANG, Civilians, Retirees, and Beneficiates), network applications and infrastructure. These systems include items such as client servers, computer hardware and software, LANs, web self service and relational database management technologies and associated equipment to support all phases of the personnel life cycle, including accession, training, assignment, promotion, and retirement/separation. There are two programs:

- a. MILITARY PERSONNEL DATA SYSTEM: MilPDS funding supports all AF Military Personnel Operations to include technology refresh for hardware supporting a variety of AF personnel applications such as: Automated Records Management Systems and Virtual Military Personnel Flight among others. Funding also supports MilPDS Federal Data Center Consolidation Initiative (FDCCI) compliance efforts.
- b. AIR FORCE PERSONNEL OPERATIONS ACTIVITY (AFPOA) OPERATIONS: Funding provides for the procurement of the AFPOA data center infrastructure, including hardware and some software maintenance. Funding is used to support telephony requirements of the AF Total Force Service Centers at San Antonio and Denver. It also supports the Federal Data Center Consolidation Initiative (FDCCI) compliance efforts directed by Public Law 104-106 and 105-261 and DoDI 1400.25, Vol 1100.

#### PE 1203173F Space and Missile Test and Evaluation Center - P-40A

The Research and Development Space and Missile Operations (RDSMO) program, executed by the Advanced Systems and Development Directorate at Kirtland AFB, NM, conducts space and missile Research and Developmental Test and Evaluation (RDT&E) and Initial Operational Test and Evaluation (IOT&E) in support of experimental, demonstration, and operational satellites. The program develops, acquires, and operates satellite command and control (C2) and fixed/deployable telemetry, tracking, and commanding (TT&C) antenna systems in support of AF and DoD missions. The RDSMO program is responsible for the design, development, integration, testing, sustainment, and operations of the Multi-Mission Satellite Operations Center (MMSOC) C2 systems installed in the RDT&E Support Complex (RSC) at Kirtland AFB, NM and at the Satellite Operations Center 11 (SOC11) located at Schriever AFB, CO.

PE 1203174F Space Innovation, Integration and Rapid Technology Development - P-40A

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|--|--|---|---|--|
| Exhibit P-40, Budget Line Item Justification: FY 2018  | 3 Air Force  |   | Date: May 2017  |  |
| Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 4: Spcl Comm-Electronics Projects   |  | P-1 Line Item Number / Title: 834010 / General Information Technology   |   |  |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It   | ems: N/A  | Other Related Program Elements: 0207697F, 0208087F, 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, 0901279F, 0901299F, 1203173F, 1203174F  |  |
| Line Item MDAP/MAIS Code: CAMI   |  |   |   |  |
| Located at Peterson AFB, Colorado, the Space Innovation, Integration Command's Space Analysis Center uses for operations research, mili analyses of alternatives, and other activities. Development activities in tools to ensure their data and technology remain current. Its innovation operations, thereby enabling service and joint warfighters to realized to DISTRIBUTED COMMUNICATIONS ARCHITECTURE: This system and to assist in development, testing, and validation of SIIRTD innovations. SPACE ANALYSIS CENTER: Air Force Space Command's Space Ar | litary utility analyses, tradeoff studies<br>ncorporate changes in fielded and p<br>on, education, and training activities<br>the full potential of existing and plan<br>provides a network based communication projects supporting the Comba<br>nalysis Center uses modeling and si<br>requirements generation, analyses of | s, and other evaluations of s<br>rojected space operational<br>foster solutions to operation<br>ned space capabilities.<br>cations capability enabling<br>t Air Forces. It can also sup<br>mulation tools to conduct of | space mission areas to guide planning, programming, requirements generation, capabilities, as well as technical improvements, into the group's software nal deficiencies and enhance the integration of space systems into Air Force dispersed space personnel to participate in space exercises and wargames |  |
|  |  |   |   |  |
|  |  |   |   |  |

LI 834010 - General Information Technology Air Force

P-1 Line #26

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834010 / General Information Technology

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207697F, 0208087F,

0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F,

0901279F, 0901299F, 1203173F, 1203174F

Line Item MDAP/MAIS Code: CAMI

ID Code (A=Service Ready, B=Not Service Ready): A

| Exhibits Schedule |  |               | Prior Years | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |  |
|-------------------|--|---------------|-------------|--|--|--|--|--|--|
| Exhibit<br>Type   | Title*   | Subexhibits C |             | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a             | US Northern Command Communications                             |               |             | - / -                                    | - /2.917                                 | - / 3.457                                | - /3.908                                 | - / 0.000                                | - / 3.908                                |
| P-40a             | ISR Innovations  |               |             | - / -                                    | - /4.701                                 | - /5.863                                 | - / 6.599                                | - / 0.000                                | - / 6.599                                |
| P-40a             | C2ISR Tactical Data Link                                       |               |             | - / -                                    | - /2.246                                 | - / 1.580                                | - / 2.875                                | - / 0.000                                | - / 2.875                                |
| P-40a             | Combat Air Forces (CAF) Exercises and Readiness Training       |               |             | - / -                                    | - / 0.164                                | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a             | Wargaming and Simulation Centers                               |               |             | - / -                                    | - / 0.594                                | - /1.199                                 | - / 0.799                                | - / 0.000                                | - / 0.799                                |
| P-40a             | Distributed Training and Exercises                             |               |             | - / -                                    | - / 0.248                                | - / 0.339                                | - / 0.337                                | - / 0.000                                | - / 0.337                                |
| P-40a             | AF OFFENSIVE CYBERSPACE OPERATIONS                             |               |             | - / -                                    | - /1.329                                 | - / 1.554                                | - /8.781                                 | - / 0.000                                | - / 8.781                                |
| P-40a             | Air Force Communications (AIRCOM)                              |               |             | - / -                                    | - / 3.953                                | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a             | Security and Investigative Activities                          |               |             | - / -                                    | - /1.337                                 | - /1.800                                 | - /1.790                                 | - / 0.000                                | - / 1.790                                |
| P-40a             | Communications and Information Technology                      |               |             | - / -                                    | - / 0.000                                | - /5.102                                 | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a             | Tactical Data Networks Enterprise                              |               |             | - / -                                    | - / 0.002                                | - / 1.842                                | - / 0.312                                | - / 0.000                                | - / 0.312                                |
| P-40a             | Logistics Support Activities                                   |               |             | - / -                                    | - / 0.000                                | - /1.177                                 | - / 1.426                                | - / 0.000                                | - / 1.426                                |
| P-40a             | Joint Logistics Program - Total Asset Visibility               |               |             | - / -                                    | - /5.620                                 | - /5.604                                 | - / 3.539                                | - / 0.000                                | - / 3.539                                |
| P-40a             | Recruit Training Units   |               |             | - / -                                    | - / 0.630                                | - / 1.624                                | - / 0.847                                | - / 0.000                                | - / 0.847                                |
| P-40a             | Service Academies  |               |             | - / -                                    | - /3.227                                 | - / 0.074                                | - /1.812                                 | - / 0.000                                | - / 1.812                                |
| P-40a             | Service Academies  |               |             | - / 0.000                                | - / 0.000                                | - /3.300                                 | - / 9.103                                | - / 0.000                                | - / 9.103                                |
| P-40a             | General Skill Training   |               |             | - / -                                    | - / 0.455                                | - / 0.695                                | - / 0.692                                | - / 0.000                                | - / 0.692                                |
| P-40a             | Professional Military Education                                |               |             | - / 0.000                                | - / 0.000                                | - / 0.000                                | - /1.017                                 | - / 0.000                                | - / 1.017                                |
| P-40a             | Other Professional Education                                   |               |             | - / -                                    | - / 0.357                                | - / 0.494                                | - / 0.492                                | - / 0.000                                | - / 0.492                                |
| P-40a             | Support of the Training Establishment                          |               |             | - / -                                    | - / 0.730                                | - /1.016                                 | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a             | Facilities Operation - Administrative                          |               |             | - / -                                    | - / 0.000                                | - / 0.000                                | - / 0.760                                | - / 0.000                                | - / 0.760                                |
| P-40a             | AF A1 Systems  |               |             | - / -                                    | - / 0.786                                | - /1.601                                 | - /3.112                                 | - / 0.000                                | - / 3.112                                |
| P-40a             | Space and Missile Test and Evaluation Center                   |               |             | - / -                                    | - / 1.435                                | - /1.977                                 | - / 1.964                                | - / 0.000                                | - / 1.964                                |
| P-40a             | Space Innovation, Integration and Rapid Technology Development |               |             | - / -                                    | - /1.221                                 | - /1.481                                 | - / 1.661                                | - / 0.000                                | - / 1.661                                |
| P-40              | Total Gross/Weapon System Cost                                 |               |             | - / 0.000                                | - / 31.952                               | - / 41.779                               | - / 51.826                               | - / 0.000                                | - / 51.826                               |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

PE 0201130F US Northern Command Communications - P-40A

**UNCLASSIFIED** 

| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 | Date: May 2017                          |  |
|---|---|--|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title:           |  |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834010 / General Information Technology |  |
| Equip / BSA 4: SpcI Comm-Electronics Projects                                   |   |  |

| ID Code (A=Service Ready, B=Not Service Ready): A | Program Elements for Code B Items: N/A | Other Related Program Elements: 0207697F, 0208087F,         |
|---|--|---|
|   |  | 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, |
|   |  | 0901279F, 0901299F, 1203173F, 1203174F                      |

#### Line Item MDAP/MAIS Code: CAMI

- a. NORAD AND NORTHCOM INTEROPERABLE COMMUNICATIONS: FY18 funding procures equipment and associated support that provide deployable, interoperable commercial communications capability NORAD USNORTHCOM Headquarters; USNORTHCOM Domestic Operations (DOMOPS), and Subordinate Commands). The system consists of deployable communications base stations, Infrastructure and Joint Tactical Radio System handsets to enable the Defense Support of Civil Authorities mission.
- b. DEPLOYABLE COMMUNICATION CAPABILITY SYSTEM LIFE CYCLE MANAGEMENT: FY18 funding ensures system life cycle support of the Deployable Communications Fleet, as well as, the lifecycle maintenance of these USNORTHCOM deployable communication systems. A centralized managed construct to enable the configuration management of deployable communication systems.
- c. EARLY WARNING RADAR (EWR) COMMUNICATIONS EQUIPMENT: No FY18 funding requested

#### PE 0207277F ISR Innovations - P-40A

FY17 funds will provide 1) Procurement of a standardized imagery tasking and management system for handling customer requirements and collection requests; 2) Shelter improvements to include changes to system configuration to reduce physical footprint; and 3) Integration of enhanced synthetic aperture RADAR (SAR) capabilities.

#### PE 0207448F C2ISR Tactical Data Link - P-40A

FY18 budget will enable procurement of 30 kits to satisfy two mandates (FAA frequency and NSA crypto), among other operational reliability and capability improvements under a Block Upgrade (BU2) effort planned for the Link 16 Multifunctional Information Distribution System (MIDS) Low Volume Terminal (LVT). BU2 will procure new Signal Message Processor (SMP) cards which incorporates the current NSA-mandated cryptographic standards. BU2 will also procure a new Tailored Processor/Ground Multiplexer card, update software and firmware in the MIDS LVT to improve operational reliability and provide the radio the ability to remap the lower frequency range of the terminal. The new cards will be installed in all terminals and spare cards will also be purchased. All together BU2 will procure a retrofit kit which includes the SMP cards, Tailored Processor/Ground Multiplexer card, and updated software and firmware.

#### PE 0207605F Wargaming and Simulation Centers - P-40A

FY18 procurement funding assures capital equipment replacement and network system upgrades for the command and control, warfighting, and support training systems at the tactical and operational levels of warfare. The equipment allows the WPC to lead USAFE-AFAFRICA toward full integration of Live, Virtual, and Constructive (LVC) capabilities and connectivity with our Coalition partners.

#### PE 0207697F Distributed Training and Exercises - P-40A

AIR FORCE DISTRICT WASHINGTON: FY18 funding will be used to procure hardware, software and licensing to build Wargame Information Environment (WIE) 3.6 in support of CSAF and AFMAJCOMs objective priorities for Air Force Wargaming Series 17.

#### PE 0208087F AF OFFENSIVE CYBERSPACE OPERATIONS - P-40A

Funds procure student mission training systems (hardware, software, network infrastructure and IT related equipment) supporting Information & Cyber Operations training needs of approximately 700 students per year.

### PE 0303112F Air Force Communications (AIRCOM) - P-40A

No FY18 funding requested.

#### PE 0305128F Security and Investigative Activities - P-40A

FY18 funds will provide AFOSI Server Virtualization, which will increase efficiency of limited system administrative staff and reduce future capital investment costs of new hardware. The virtual server environment also delivers new capability not available in a non-virtual server environment, such as rapid Information Assurance patching, automatic error detection, failover and disaster recovery of critical applications, reduce footprint from both a physical space and energy perspective. These funds will enable AFOSI standard IT equipment and specialized investigative equipment to provide the latest capabilities of specialized investigative support to DoD/USAF investigations/operations both in-garrison and in support of wartime operations, for over 3,000 AFOSI personnel in more than 250 worldwide locations.

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 | Date: May 2017                          |  |
|---|---|--|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title:           |  |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834010 / General Information Technology |  |
| Equip / BSA 4: Spcl Comm-Electronics Projects                                   |   |  |

| ID Code (A=Service Ready, B=Not Service Ready): A | Program Elements for Code B Items: N/A | Other Related Program Elements: 0207697F, 0208087F,         |
|---|--|---|
|   |  | 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, |
|   |  | 0901279F, 0901299F, 1203173F, 1203174F                      |

Line Item MDAP/MAIS Code: CAMI

PE 0305173F Space and Missile Test and Evaluation Center - P-40A Space and Missile Test and Evaluation Center PE 1203173F - P-40A

FY18 funds will be used to purchase hardware and software to support the implementation of the Multi-Mission Satellite Operations Center (MMSOC) C2 product in in support of Enterprise Ground Services (EGS) requirements. Note: Due to the creation of a new Major Force Program for Space, funding in this exhibit for this effort from "Prior Years" to FY 2017 was originally budgeted in the PE 0305173F. Funding in this exhibit for this effort from FY 2018 to "Cost to Completion" is budgeted in PE 1203173F.

PE 0305174F Space Innovation, Integration and Rapid Technology Development - P-40A

FY18 funding supports the AFSPC Space Analysis Center Virtual Analysis Capability (AVAC) system. A stand-alone system that provides a crosscutting capability to conduct, support, and report analysis on a myriad of tools, data, models and simulations. This system allows leadership to make decisions based on quantifiable operational impacts output from AVAC based on various vignettes and studies applied to space and cyber assets. Funding buys system-specific hardware, software, routers, licenses, etc., to maintain the efficiency and compatibility with all current models.

PE 0604281F Tactical Data Networks Enterprise - P-40A

FY18 funding provides procurement for all Tactical Data Link (TDL) enterprise efforts. This includes equipment, fielding support, and associated contract support for the fielded Family of Gateways, as well as capability enhancements to TDLs, gateways, and AF contributions to the Joint Aerial Layer Network (JALN). These airborne networking systems enable combat forces to exchange information quickly and accurately by bridging discrete airborne, terrestrial, maritime, and space-based C4ISR networks.

PE 0708012F Logistics Support Activities - P-40A

FY18 funding supports the procurement of Installation Processing Node (IPN) and Local Area Network (LAN) Tech refresh: routers, servers, network storage and switches that provide core network services critical to the sustainment of the Business and Enterprise Systems (BES) portfolio of systems. These systems support the daily business of the Air Force including pay, logistics, Civil Engineering, Medical, and enterprise software license management. Provides end-of-life equipment replacement for a fully operational LAN.

PE 0708074F Joint Logistics Program - Total Asset Visibility - P-40A

AUTOMATIC IDENTIFICATION TECHNOLOGY (AIT): FY 18 funding will be used to implement the use of Item Unique Identification (IUID) for tracking and accounting for CLASS II, VII and IX assets, to meet DoD mandate.

PE 0804711F Recruit Training Units - P-40A

BASIC MILITARY TRAINING (BMT) SURVEILLANCE SECURITY SYSTEM: Directly

supports CSAF memo 14 Nov 12, "Combating Sexual Assault in the Air Force."

FY18 funding allows for the continuation to procure/install surveillance systems, eliminating weaknesses in detection measures by improving the security surveillance in the Airman Training Complexes (ATCs), and the Dining and Classroom Facilities (DCF). Mitigates risk and secures the physical safety of ~37K Basic Military Trainees. Achieves capability of an enduring culture that promotes a safe, secure, and productive training environment for all Airmen. Effectively target limited resources to deter, detect, dissuade and hold personnel accountable in all BMT facilities.

PE 0804721F Service Academies - P-40A US AIR FORCE ACADEMY (USAFA):

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| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force  |  | Date: May 2017 |
|--|--|----------------|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 4: Spcl Comm-Electronics Projects | P-1 Line Item Number / Title:<br>834010 / General Information Technology |                |

| ID Code (A=Service Ready, B=Not Service Ready): A | Program Elements for Code B Items: N/A | Other Related Program Elements: 0207697F, 0208087F,         |
|---|--|---|
|   |  | 0305173F, 0305174F, 0604281F, 0804721F, 0804752F, 0804771F, |
|   |  | 0901279F, 0901299F, 1203173F, 1203174F                      |

#### Line Item MDAP/MAIS Code: CAMI

- (1) AIR FORCE ACADEMY COMPUTER SUPPORT: FY18 funds procure IT to upgrade performance, security, and availability of USAFA.MIL and USAFA.EDU to comply with AF Enterprise Architecture standards in order to support the AF Academy mission. FY18 funds procure IT integral to the operation of each network in support of the Air Force Academy mission.
- (2) CADET ADMINISTRATION MANAGEMENT INFORMATION SYSTEM (CAMIS): FY18 funds also continue the modernization of CAMIS, which resides on the USAFAEDU domain. CAMIS is a cradle-to-grave system supporting all facets of student management including recruitment and outreach, admissions, registrar, preparatory, academic, athletic, military training assessments from the candidate's initial application to graduation & commissioning and continuing through the military career of each cadet. FY18 funding increase is due to the modernization effort to transition CAMIS from a custom-coded system to a primarily Commercial Off the Shelf (COTS)-based system, including the integration of the COTS products and interfaces with GOTS systems.

#### PE 0804731F General Skill Training - P-40A

GENERAL SKILL TRAINING: Funding supports procurement of electronic and telecom equipment supporting the General Skills Training enterprise, and primarily includes video equipment and training management systems equipment (other than TTMS).

TECHNICAL TRAINING MANAGEMENT SYSTEM (TTMS): FY17 funding supports the primary requirement objectives currently under development: 1)Integration of Basic Training Management System (BTMS) capabilities and student records into the TTMS.

#### PE 0804751F Professional Military Education - P-40A

Funds procure IT systems, services, and resources that comprise AU Enterprise ET/IT portfolio. The primary systems under AU IT are CDSAR, STARS, AUSIS, AUREPM, and AUSMS. This portfolio provides enrollment, content delivery, and student administration capabilities critical to all AU resident to all AU resident and non-resident courses. At the Air Force level, A6 provides the system of record capability for all AF PME/PCE; a system crucial to ensuring a fully prepared (trained and educated) expeditionary force.

#### PE 0804752F Other Professional Education - P-40A

FY18 funding supports AFIT Lab Equipment: Laboratory Equipment procurement funding provides for: Satellite Communication Ground Stations, Cube Sat Flight Hardware, Space Thruster Measurement System, UHF High Frequency Stages, Time Resolved Particle Image Velocimetry System, Digiscan CL3 System for the AFIT clean room, Space Chromotomography Equipment, Space Electronics Laboratory, Laser Steering Mirror System, CTEx Phantom Camera, Low Temp Flow System for EPR, Microwave Cavity B-field Sensor, Sample Load Lock System, Point Probe with ITO Reference Sample, Micro Thermal Imaging System, Circuit Failure Analysis Digital Microscope System, Pioneer Power-Bot AGV Robot, GPS Receivers, IMU and accessories, Dual-Output Programmable Power Supplies, and Scanning Electron Microscope equipment to support graduate student thesis and dissertations research.

PE 0901279F FY18 funds next generation IT.

#### PE 0901299F AF A1 Systems - P-40A

FY18 Funding supports the MilPDS and AFPOA Operations programs. Effective in FY17, the Regionalization of Civilian Personnel Support, Personnel Service Delivery and Air Force Personnel Center were consolidated for more effective management and oversight into Air Force Personnel Operations Agency (AFPOA) Network Infrastructure.

- 1. MILITARY PERSONNEL DATA SYSTEM: MilPDS funding supports all AF Military Personnel Operations to include technology refresh for hardware supporting a variety of AF personnel applications such as: Automated Records Management Systems and Virtual Military Personnel Flight among others. Funding also supports MilPDS FDCCI compliance efforts.
- 2. AIR FORCE PERSONNEL OPERATIONS ACTIVITY (AFPOA) Operations: AFPOA includes Regionalization of Civilian Personnel Support, Personnel Service Delivery and Air Force Personnel Center. Funding provides for the operation and sustainment of the AFPOA contact center telephony solution. Specifically, funding provides for modular software additions, upgrades, continuing stabilization, and sustainment of the current Genesys telephony solution supporting the Total Force Service Center, Services, A1 Service Desk, and other A1 contact center entities. The individual funding lines for

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|--|---|--|---|--|
| Exhibit P-40, Budget Line Item Justification   | n: FY 2018 Air Force  |  |   | Date: May 2017   |
| Appropriation / Budget Activity / Budget Su<br>3080F: Other Procurement, Air Force / BA 03:<br>Equip / BSA 4: Spcl Comm-Electronics Project  | Electronics and Telecommunications  | <b>P-1 Line Item</b> 834010 / Gene   |   |  |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It  | tems: N/A  | 0305173F, 03051   | rogram Elements: 0207697F, 0208087F, 174F, 0604281F, 0804721F, 0804752F, 0804771F, 1203173F, 1203174F  |
| Line Item MDAP/MAIS Code: CAMI   |   |  |   |  |
| REGIONALIZATION OF CIVILIAN PERSONNEL SUPPO funding line.  PE 1203173F Space and Missile Test and Evaluation Ce FY18 funds will be used to purchase hardware and softw of a new Major Force Program for Space, funding in this to Completion" is budgeted in PE 1203173F.  PE 1203174F Space Innovation, Integration and Rapid T FY18 funding supports the AFSPC Space Analysis Center myriad of tools, data, models and simulations. This syste space and cyber assets. Funding buys system-specific his Efforts with funding starting in FY 2019 through FY 2 follows: | enter - P-40A vare to support the implementation of the MMSO exhibit for this effort from "Prior Years" to FY 20 Fechnology Development - P-40A er Virtual Analysis Capability (AVAC) system. A em allows leadership to make decisions based or ardware, software, routers, licenses, etc., to main | oC C2 product in in su<br>17 was originally buc<br>stand-alone system t<br>n quantifiable operati<br>intain the efficiency a | upport of Enterprise Ground Service Igeted in the PE 0305173F. Funding that provides a crosscutting capabonal impacts output from AVAC band compatibility with all current more compatibility with all current more provides as a crosscutting capabonal impacts. | res (EGS) requirements. Note: Due to the creation<br>ng in this exhibit for this effort from FY 2018 to "Cost<br>ility to conduct, support, and report analysis on a<br>ased on various vignettes and studies applied to<br>odels. |
| Tollows.   |   | <sup>(a)</sup> FY 2019 Cost  | Delta: 49.231 million   |  |
|  |   |  | Delta: 41.179 million   |  |
|  |   |  | Delta: 39.567 million   |  |
|  |   |  | Delta: 38.505 million   |  |
|  |   | (e) FY Total Cost  | Delta: 294.039 million  |  |
|  |   |  |   |  |
|  |   |  |   |  |
|  |   |  |   |  |
|  |   |  |   |  |
|  |   |  |   |  |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 4

P-1 Line Item Number / Title:
834010 / General Information Technology

US Northern Command Communications

| 00001 7 00 7 1  |          |                       |           |               |                         |           | '             |                         | 000.0.    |               |                         | 51 II 1010g y |               |                         | •         | 0 1101111     | o                       |           | o             | 0400                    |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|---------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | F         | Prior Year    | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY            | ′ 2018 Ba     | se                      | F`        | Y 2018 OC     | o                       | F         | / 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]                                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |           |               | ,                       | ,         |               | <u>'</u>                |           |               |                         | '             |               | '                       |           | '             |                         |           |               | ,                       |
| INTEROPERABLE COMMUNICATION                                       | Α        |                       | -         | -             | -                       | -         | -             | 0.581                   | -         | -             | 0.581                   | -             | -             | 0.550                   | -         | -             | 0.000                   | -         | -             | 0.550                   |
| DEPLOYABLE COMMUNICATIONS CAPABILITY SYSTEM LIFE CYCLE MANAGEMENT | A        |                       | -         | -             | -                       | -         | -             | 2.336                   | -         | -             | 2.876                   | -             | -             | 3.358                   | -         | -             | 0.000                   | -         | -             | 3.358                   |
| EARLY WARNING<br>RADAR (EWR)<br>COMMUNICATIONS<br>EQUIPMENT       | А        |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -             | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Subtotal: Uncategorized   |          |                       | -         | -             | -                       | -         | -             | 2.917                   | -         | -             | 3.457                   | -             | -             | 3.908                   | -         | -             | 0.000                   | -         | -             | 3.908                   |
| Total   |          |                       | -         | -             | -                       | -         | -             | 2.917                   | -         | -             | 3.457                   | -             | -             | 3.908                   | -         | -             | 0.000                   | -         | -             | 3.908                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Items Title: 3080E 103 14 834010 / General Information Technology ISR Innovations

| 3080F / 03 / 4   |          |                       |           |               |                         |           | '             | 8340101                 | General   | inioima              | ition red               | chnology  | ,             |                         | IC        | K innov       | ations                  |           |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | Р         | rior Year     | s                       |           | FY 2016       | 5                       |           | FY 2017              |                         | FY        | / 2018 Ba     | se                      | F         | / 2018 OC     | 0                       | FY        | ′ 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized  |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |
| (1). EAGLE VISION<br>DATA ACQUISITION<br>SYSTEM REFRESH/<br>CAPITAL<br>EQUIPMENT<br>REPLACEMENT PE<br>0207277F | A        |                       | -         | -             | -                       | -         | -             | 4.600                   | -         | -                    | 5.700                   | -         | -             | 6.400                   | -         | -             | -                       | -         | -             | 6.400                   |
| (3). EAGLE VISION<br>PROGRAM<br>MANAGEMENT<br>ADMINISTRATION<br>(PMA)  | A        |                       | -         | -             | -                       | -         | -             | 0.101                   | -         | -                    | 0.163                   | -         | -             | 0.199                   | -         | -             | 0.000                   | -         | -             | 0.199                   |
| Subtotal: Uncategorized  |          |                       | -         | -             | -                       | -         | -             | 4.701                   | -         | -                    | 5.863                   | -         | -             | 6.599                   | -         | -             | 0.000                   | -         | -             | 6.599                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 4.701                   | -         | •                    | 5.863                   | -         | -             | 6.599                   | -         | -             | 0.000                   | -         | -             | 6.599                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

Due to the lifecycle of commercial satellites, Eagle Vision must update the system to retain the capability of downlinking imagery. As one commercial satellite constellation is decommissioned, Eagle Vision must procure hardware and software of a new satellite to allow for downlinking from the new satellite system. Currently Eagle Vision contains the hardware and software to receive downlinking from SPOT 6/7, TerraSAR-X/TANDEM-X, and Worldview satellites. Eagle Vision Block II will acquire the Pleiades 1A/1B downlinking capability and upgrade the dissemination performance to the Data Integration Segment (DIS).

**Date:** May 2017 Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Aggregated Items Title: C2ISR Tactical Data Link Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: 3080F / 03 / 4 834010 / General Information Technology

|                                       |          |                       |           |               |                         |           | •             |                         |           |               |                         |           |               |                         | -         |               |                         |           |               |                         |
|---------------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                       |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Bas    | se                      | FY        | / 2018 OC     | 0                       | FY        | 2018 Tot      | tal                     |
| Item Number /<br>Title [DODIC]        | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| INSTALL KITS (Active) PE              | E 0207   | 7488F                 |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Install Kits (Active) PE<br>0207488F  | A        |                       | -         | -             | -                       | 0.082     | 24            | 1.972                   | 0.082     | 16            | 1.306                   | 0.082     | 30            | 2.461                   | -         |               | 0.000                   | 0.082     | 30            | 2.461                   |
| Subtotal: INSTALL KITS (.<br>0207488F | Activ    | e) PE                 | -         | -             | -                       | -         | -             | 1.972                   | -         | -             | 1.306                   | -         | -             | 2.461                   | -         | -             | 0.000                   | -         | -             | 2.461                   |
| Other Government Suppo                | ort      |                       |           |               | ,                       |           |               |                         |           | ,             |                         |           |               |                         |           |               | ,                       |           |               |                         |
| Other Government<br>Support           | A        |                       | -         | -             | -                       | 0.274     | 1             | 0.274                   | 0.274     | 1             | 0.274                   | 0.414     | 1             | 0.414                   | -         | -             | 0.000                   | 0.414     | 1             | 0.414                   |
| Subtotal: Other Governm               | ent S    | upport                | -         | -             | -                       | -         | -             | 0.274                   | -         | -             | 0.274                   | -         | -             | 0.414                   | -         | -             | 0.000                   | -         | -             | 0.414                   |
| Total                                 |          |                       | -         | -             | -                       | -         | -             | 2.246                   | -         | -             | 1.580                   | -         | -             | 2.875                   | -         | -             | 0.000                   | -         | -             | 2.875                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:
834010 / General Information Technology

Combat Air Forces (CAF) Exercises and Readiness Training

| MDAD  |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         | ' '       |               | · a                     | .9        |               |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | Р         | rior Years    | S                       |           | FY 2016       |                         |           | FY 2017              |                         | FY        | / 2018 Bas           | se                      | F         | 7 2018 OC     | 0                       | FY        | / 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |
| COMBAT AIR<br>FORCE EXERCISES<br>AND READINESS<br>TRAINING PE<br>0207603F | A        |                       | -         | -             | -                       | -         | -             | 0.164                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Subtotal: Uncategorized   |          |                       | -         | -             | -                       | -         | -             | 0.164                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Total   |          |                       | -         | -             | -                       | -         | -             | 0.164                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ems: FY 2018 Air Force                  | Date: May 2017                   |
|---|---|----------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | P-1 Line Item Number / Title:           | Aggregated Items Title:          |
| 3080F / 03 / 4  | 834010 / General Information Technology | Wargaming and Simulation Centers |

| 30001 7 03 7 4                                  |          |                       |           |               |                         |           |               | 0340101                 | General   | IIIIOIIIIE           | illoii i et             | Jililology |                      |                         | • •       | argarriii     | ig and c                | minulatio | ii Cente             | 13                      |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|------------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|
|   |          |                       | P         | rior Year     | s                       |           | FY 2016       | 3                       |           | FY 2017              |                         | FY         | / 2018 Ba            | se                      | F         | Y 2018 OC     | o                       | F         | 2018 To              | tal                     |
| Item Number /<br>Title [DODIC]                  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                                   |          |                       |           |               | ,                       | ,         |               |                         |           |                      |                         |            |                      |                         | ,         |               |                         |           |                      |                         |
| WARRIOR<br>PREPARATION<br>CENTER PE<br>0207605F | A        |                       | -         | -             | -                       | -         | -             | 0.594                   | -         | -                    | 1.199                   | -          | -                    | 0.799                   | -         | -             | 0.000                   | -         | -                    | 0.799                   |
| Subtotal: Uncategorized                         |          |                       | -         | -             | -                       | -         | -             | 0.594                   | -         | -                    | 1.199                   | -          | -                    | 0.799                   | -         | -             | 0.000                   | -         | -                    | 0.799                   |
| Total   |          |                       | -         | -             | -                       | -         | -             | 0.594                   | -         | -                    | 1.199                   | -          | -                    | 0.799                   | -         | -             | 0.000                   | -         | -                    | 0.799                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks

These procurement funds serve to refresh and upgrade network systems for the command and control, warfighting, and support training systems at the tactical and operational levels of warfare. The equipment allows the WPC to lead USAFE toward full integration of live, virtual, and constructive capabilities and connectivity with our coalition partners. This effort is funded in PE 0207605F.

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ems: FY 2018 Air Force                  | Date: May 2017                     |
|---|---|------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      |   | Aggregated Items Title:            |
| 3080F / 03 / 4  | 834010 / General Information Technology | Distributed Training and Exercises |

|   |          |                       | P         | rior Years    | s                       |           | FY 2016       |                         |           | FY 2017              |                         | FΥ        | / 2018 Bas           | se                      | FY        | / 2018 OC            | 0                       | F۱        | 2018 To       | tal                     |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]                          | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         | ,         |                      |                         |           |               |                         |
| DISTRIBUTED<br>TRAINING AND<br>EXERCISES PE<br>0207697F | A        |                       | -         | -             | -                       | -         | -             | 0.248                   | -         | -                    | 0.339                   | -         | -                    | 0.337                   | -         | -                    | 0.000                   | -         | -             | 0.337                   |
| Subtotal: Uncategorized                                 |          |                       | -         | -             | -                       | -         | -             | 0.248                   | -         | -                    | 0.339                   | -         | -                    | 0.337                   | -         | -                    | 0.000                   | -         | -             | 0.337                   |
| Total   |          |                       | -         | -             | -                       | -         | -             | 0.248                   | -         | -                    | 0.339                   | -         | -                    | 0.337                   | -         | -                    | 0.000                   | -         | -             | 0.337                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 03 / 4

834010 / General Information Technology

Aggregated Items Title:
AF OFFENSIVE CYBERSPACE

OPERATIONS

|   |          |          |                |               |                         |           |               |                         |           |               |                         |           |               |                         | -         |               | -                       |           |               |                         |
|---|----------|----------|----------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |          | Р              | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | / 2018 OC     | 0                       | FY        | / 2018 Tot    | al                      |
| Item Number /<br>Title [DODIC]                | ID<br>CD |          | Unit Cost      | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                                 |          |          |                |               | ,                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         | '         |               |                         |
| CYBER<br>WORKFORCE<br>TRAINING PE<br>0208087F | A        |          | -              | -             | -                       | 1.329     | 1             | 1.329                   | 1.554     | 1             | 1.554                   | 1.781     | 1             | 1.781                   | -         | -             | 0.000                   | 1.781     | 1             | 1.781                   |
| Subtotal: Uncategorized                       |          |          | -              | -             | -                       | -         | -             | 1.329                   | -         | -             | 1.554                   | -         | -             | 1.781                   | -         | -             | 0.000                   | -         | -             | 1.781                   |
| Cyberspace Force Appli                        | cation   | 1        |                |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Cyber Mission<br>Platform Equipment           | Α        |          | -              | -             | -                       | -         | -             | -                       | -         | -             | -                       | 1.750     | 4             | 7.000                   | -         | -             | -                       | 1.750     | 4             | 7.000                   |
| Subtotal: Cyberspace Fo<br>Application        | orce     |          | -              | -             | _                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 7.000                   | -         | -             | -                       | -         | -             | 7.000                   |
| Total   |          |          | -              | -             | -                       | -         | -             | 1.329                   | -         | -             | 1.554                   | -         | -             | 8.781                   | -         | -             | 0.000                   | -         | -             | 8.781                   |
| Maker Culetetele en Tei                       | 4-1- :   | 41-1- E. | JE 15 D 40 - 1 |               |                         | 41        |               | !!                      |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

| Exhibit P-40a, Budget Item Justification For Aggregated | tems: FY 2018 Air Force                 | <b>Date:</b> May 2017             |
|---|---|-----------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:  | P-1 Line Item Number / Title:           | Aggregated Items Title:           |
| 3080F / 03 / 4  | 834010 / General Information Technology | Air Force Communications (AIRCOM) |

| 00001 7 00 7 1   |          |                       |           |               |                         |           |               | 00 10 10 7              | Contoral  |               | 10011 100               | , iii lology |               |                         |           | 0.00          | Commi                   | moduom    | <i>y</i> (, , , , , , , , , , , , , , , , , , , | J.V.)                   |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---|-------------------------|
|  |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FΥ           | ′ 2018 Ba     | se                      | F         | 2018 OC       | :0                      | F         | <b>2018 To</b>                                  | tal                     |
| Item Number /<br>Title [DODIC]                               | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)                                   | Total<br>Cost<br>(\$ M) |
| Uncategorized  |          |                       |           |               |                         |           |               |                         | ,         |               |                         |              |               |                         |           |               |                         |           |   |                         |
| AIRBORNE<br>NETWORKING<br>INTEGRATION<br>(OCO) (PE 0303112F) | A        |                       | -         | -             | -                       | -         | -             | 3.953                   | -         | -             | 0.000                   | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -   | 0.000                   |
| Subtotal: Uncategorized                                      |          |                       | -         | -             | -                       | -         | -             | 3.953                   | -         | -             | 0.000                   | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -   | 0.000                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 3.953                   | -         | -             | 0.000                   | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -   | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks

The ANGI FY15 and FY16 OCO funding will engineer and field 2 consolodated airborne communications GIG entry point system. In addition, the funding will support Interim Contractor Support (ICS).

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force                   | Date: May 2017                        |
|---|---|---------------------------------------|
| 1                     |   | Aggregated Items Title:               |
| 3080F / 03 / 4  | 834010 / General Information Technology | Security and Investigative Activities |

|                                |          |                       |           |               |                         |           | -             |                         |           |                      |                         |           |                      |                         | -         |               | -                       |           |               | _                       |
|--------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017              |                         | FY        | ′ 2018 Ba            | se                      | F         | 2018 OC       | 0                       | FY        | ′ 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                  |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         | ,         |               |                         |           |               |                         |
| OSI OPERATIONS<br>PE 0305128F  | A        |                       | -         | -             | -                       | -         | -             | 1.337                   | -         | -                    | 1.800                   | -         | -                    | 1.790                   | -         | -             | 0.000                   | -         | -             | 1.790                   |
| Subtotal: Uncategorized        |          |                       | -         | -             | -                       | -         | -             | 1.337                   | -         | -                    | 1.800                   | -         | -                    | 1.790                   | -         | -             | 0.000                   | -         | -             | 1.790                   |
| Total                          |          |                       | -         | -             | -                       | -         | -             | 1.337                   | -         | -                    | 1.800                   | -         | -                    | 1.790                   | -         | -             | 0.000                   | -         | -             | 1.790                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:
834010 / General Information Technology

Communications and Information Technology

|  |          |                       |           |                      |                         |           |               |                         |           |               |               |           |               |                         |           | •             | 0,                      |           |               |                         |
|--|----------|-----------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|---------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | F         | rior Year            | s                       |           | FY 2016       |                         |           | FY 2017       |               | F۱        | / 2018 Ba     | se                      | F         | Y 2018 OC     | 0                       | F۱        | 2018 To       | tal                     |
| Item Number /<br>Title [DODIC]                                 | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Communications and Info  | ormat    | ion Tecl              | nnology   | . ,                  |                         |           |               |                         |           | , , ,         |               |           |               |                         |           |               |                         |           |               |                         |
| Communications<br>and Information<br>Technology PE<br>0308611F | A        |                       | -         | -                    | -                       | -         | -             | 0.000                   | -         | -             | 5.102         | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Subtotal: Communication<br>Information Technology              | ns and   | d                     | -         | -                    | -                       | -         | -             | 0.000                   | -         | -             | 5.102         | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Total  |          |                       | -         | -                    | -                       | -         | -             | 0.000                   | -         | -             | 5.102         | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>834010 / General Information TechnologyAggregated Items Title:<br/>Tactical Data Networks Enterprise

|   |          |                       |           |               |                         |           | 1             |                         |           |               |                         |           |                      |                         | ' '       |               |                         | ······ —  |               |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Bas           | se                      | F         | 7 2018 OC     | :0                      | F         | 7 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]                              | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |
| c. TACTICAL<br>DATA NETWORKS<br>ENTERPRISE (PE<br>0604281F) | A        |                       | -         | -             | -                       | -         | -             | 0.002                   | -         | -             | 1.842                   | -         | -                    | 0.312                   | -         | -             | 0.000                   | -         | -             | 0.312                   |
| Subtotal: Uncategorized                                     |          |                       | -         | -             | -                       | -         | -             | 0.002                   | -         | -             | 1.842                   | -         | -                    | 0.312                   | -         | -             | 0.000                   | -         | -             | 0.312                   |
| Total   |          |                       | -         | -             | -                       | -         | -             | 0.002                   | -         | -             | 1.842                   | -         | -                    | 0.312                   | -         | -             | 0.000                   | -         | -             | 0.312                   |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force | Date: May 2017                                       |
|---|-----------------------|--|
|   |                       | Aggregated Items Title: Logistics Support Activities |

|   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               | It It                   |           |               |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | F         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | F         | Y 2018 OC     | ю                       | F         | 7 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]                              | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         | ,         |               |                         | •         |               |                         |
| GUNTER AIR FORCE<br>BASE NETWORK<br>SERVICES PE<br>0708012F | A        |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 1.177                   | -         | -             | 1.426                   | -         | -             | 0.000                   | -         | -             | 1.426                   |
| Subtotal: Uncategorized                                     |          |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 1.177                   | -         | -             | 1.426                   | -         | -             | 0.000                   | -         | -             | 1.426                   |
| Total   |          |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 1.177                   | -         | -             | 1.426                   | -         | -             | 0.000                   | -         | -             | 1.426                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 03 / 4

834010 / General Information Technology

Aggregated Items Title:
Joint Logistics Program - Total Asset

Visibility

|  |    |       | Р         | rior Year | s      |           | FY 2016 |        |           | FY 2017 |        | FΥ        | ′ 2018 Ba | se     | F۱        | / 2018 OC | :0     | F۱        | ' 2018 Tot | :al    |
|--|----|-------|-----------|-----------|--------|-----------|---------|--------|-----------|---------|--------|-----------|-----------|--------|-----------|-----------|--------|-----------|------------|--------|
|  |    | MDAP/ |           |           | Total  |           |         | Total  |           |         | Total  |           |           | Total  |           |           | Total  |           |            | Total  |
| Item Number /  | ID | MAIS  | Unit Cost | Qty       | Cost   | Unit Cost | Qty     | Cost   | Unit Cost | Qty     | Cost   | Unit Cost | Qty       | Cost   | Unit Cost | Qty       | Cost   | Unit Cost | Qty        | Cost   |
| Title [DODIC]  | CD | Code  | (\$ M)    | (Each)    | (\$ M) | (\$ M)    | (Each)  | (\$ M) | (\$ M)    | (Each)  | (\$ M) | (\$ M)    | (Each)    | (\$ M) | (\$ M)    | (Each)    | (\$ M) | (\$ M)    | (Each)     | (\$ M) |
| Uncategorized  |    |       |           |           |        |           |         |        |           |         |        |           |           |        |           |           |        |           |            |        |
| Active Radio<br>Frequency<br>Identification PE<br>0708074F | A  |       | -         | -         | -      | -         | -       | 1.337  | -         | -       | 1.043  | -         | -         | 0.539  | ı         | -         | 0.000  | -         | -          | 0.539  |
| Passive Radio<br>Frequency<br>Identification               | Α  |       | -         | -         | -      | -         | -       | 1.029  | -         | -       | 1.367  | -         | -         | 1.000  | -         | -         | 0.000  | -         | -          | 1.000  |
| Item Unique<br>Identification                              | А  |       | -         | -         | -      | -         | -       | 1.913  | -         | -       | 1.042  | -         | -         | 1.000  | -         | -         | 0.000  | -         | -          | 1.000  |
| Real Time Locating<br>Systems                              | Α  |       | -         | -         | -      | -         | -       | 1.341  | -         | -       | 2.152  | -         | -         | 1.000  | -         | -         | 0.000  | -         | -          | 1.000  |
| Subtotal: Uncategorized                                    |    |       | -         | -         | -      | -         | -       | 5.620  | -         | -       | 5.604  | -         | -         | 3.539  | -         | -         | 0.000  | -         | -          | 3.539  |
| Total  |    |       | -         | -         | -      | -         | -       | 5.620  | -         | -       | 5.604  | -         | -         | 3.539  | -         | -         | 0.000  | -         | -          | 3.539  |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite           | ems: FY 2018 Air Force   | Date: May 2017                                 |
|---|--|--|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 | P-1 Line Item Number / Title:<br>834010 / General Information Technology | Aggregated Items Title: Recruit Training Units |

|  |          |                       |           |               |                         |           |               |                         |           |               |                         | 0,        |                      |                         |           |               |                         |           |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba            | se                      | F         | Y 2018 OC     | o                       | F۱        | / 2018 Tot    | al                      |
| Item Number /<br>Title [DODIC]         | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                          |          | ,                     |           |               |                         |           |               |                         | ·         |               |                         | '         |                      | '                       |           | <u>'</u>      |                         |           |               |                         |
| BMT Surveillance<br>System PE 0804711F | А        |                       | -         | -             | -                       | -         | -             | 0.630                   | -         | -             | 1.624                   | -         | -                    | 0.847                   | -         | -             | 0.000                   | -         | -             | 0.847                   |
| Subtotal: Uncategorized                |          |                       | -         | -             | -                       | -         | -             | 0.630                   | -         | -             | 1.624                   | -         | -                    | 0.847                   | -         | -             | 0.000                   | -         | -             | 0.847                   |
| Total                                  |          |                       | -         | -             | -                       | -         | -             | 0.630                   | -         | -             | 1.624                   | -         | -                    | 0.847                   | -         | -             | 0.000                   | -         | -             | 0.847                   |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force                   | Date: May 2017          |
|---|---|-------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | P-1 Line Item Number / Title:           | Aggregated Items Title: |
| 3080F / 03 / 4  | 834010 / General Information Technology | Service Academies       |

| 00001 7 00 7 4                              |          |                       |           |                      |                         |           |                      | 00-10-10-7              | Ochloral  | 1111011110           |                         | Jililology |                      |                         | 0         | CI VIOC / (   | oaaciiiic               | ,5        |               |                         |
|---|----------|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|------------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | Р         | rior Years           | S                       |           | FY 2016              | ;                       |           | FY 2017              |                         | FY         | ′ 2018 Bas           | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 To       | al                      |
| Item Number /<br>Title [DODIC]              | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                               |          |                       |           |                      |                         |           |                      |                         |           |                      |                         |            |                      |                         |           |               |                         |           |               |                         |
| SERVICE<br>ACADEMIES -<br>USAFA PE 0804721F | A        |                       | -         | -                    | -                       | -         | -                    | 3.227                   | -         | -                    | 0.074                   | -          | -                    | 1.812                   | -         | -             | 0.000                   | -         | -             | 1.812                   |
| Subtotal: Uncategorized                     |          |                       | -         | -                    | -                       | -         | -                    | 3.227                   | -         | -                    | 0.074                   | -          | -                    | 1.812                   | -         | -             | 0.000                   | -         | -             | 1.812                   |
| Total                                       |          |                       | -         | -                    | -                       | -         | =                    | 3.227                   | -         | -                    | 0.074                   | -          | -                    | 1.812                   | -         | -             | 0.000                   | -         | -             | 1.812                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

The FY18 funding increase is due to the modernization effort to transition CAMIS from a custom-coded system to a primarily Commercial Off the Shelf (COTS)-based system, including the integration of the COTS products and interfaces with GOTS systems.

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Modification Items Title:3080F / 03 / 4834010 / General Information TechnologyService Academies

|  |    |                       | P         | rior Years           | s                       |           | FY 2016              |                         |           | FY 2017              |                         | FΥ        | ′ 2018 Bas           | se                      | F۱        | / 2018 OC            | 0                       | FY        | 2018 Tot      | tal                     |
|--|----|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title  | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| CAMIS / Cadet<br>Administration<br>Management linformation<br>System |    |                       | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | 3.300                   | -         | -                    | 9.103                   | -         | -                    | -                       | -         | -             | 9.103                   |
| Total  |    |                       | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 3.300                   | -         | -                    | 9.103                   | -         | -                    | 0.000                   | -         | -             | 9.103                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### **Modification Information:**

| Item Number / Title  | Models of Systems Affected | Modification Type      |
|--|----------------------------|------------------------|
| CAMIS / Cadet Administration<br>Management Iinformation System | CAMIS                      | Capability Improvement |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:
834010 / General Information Technology

General Skill Training

| 00001 7 00 7 4                       |          |                       |           |               |                         |           | - 1           | 30-10-10-7              | Ochlora   | 1111011110    |                         | , ii iology |               |                         | 0         | Cilciai C     | ikiii i i aii           | mig       |               |                         |
|--------------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                      |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY          | / 2018 Ba     | se                      | FY        | / 2018 OC     | 0                       | F         | / 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]       | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                        |          |                       |           |               |                         |           |               |                         | ,         |               |                         |             |               |                         |           |               |                         |           |               |                         |
| GEN SKILL<br>TRAINING PE<br>0804731F | A        |                       | -         | -             | -                       | -         | -             | 0.213                   | -         | -             | 0.367                   | -           | -             | 0.366                   | -         | -             | 0.000                   | -         | -             | 0.366                   |
| TECH TNG<br>MANAGEMENT<br>SYSTEM     | A        |                       | -         | -             | -                       | -         | -             | 0.242                   | -         | -             | 0.328                   | -           | -             | 0.326                   | -         | -             | 0.000                   | -         | -             | 0.326                   |
| Subtotal: Uncategorized              |          |                       | -         | -             | -                       | -         | -             | 0.455                   | -         | -             | 0.695                   | -           | -             | 0.692                   | -         | -             | 0.000                   | -         | -             | 0.692                   |
| Total                                |          |                       | -         | -             | -                       | -         | -             | 0.455                   | -         | -             | 0.695                   | -           | -             | 0.692                   | -         | -             | 0.000                   | -         | -             | 0.692                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks

FYDP baseline data for OAC 64 ONLY.

FY18 OCO will not be developed until later in FY17, since it is a budget year only activity.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>834010 / General Information TechnologyAggregated Items Title:<br/>Professional Military Education

|   |          |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         | -         |               |                         | ,         |               |                         |
|---|----------|-----------------------|--------------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | F            | Prior Year    | s                       |              | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | F         | Y 2018 OC     | ю                       | F         | Y 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Professional Military Ed                          | ucatio   | n                     |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Professional Military<br>Education PE<br>0804751F | A        |                       | -            | -             | 0.000                   | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 1.017                   | -         | -             | 0.000                   | -         | -             | 1.017                   |
| Subtotal: Professional N<br>Education             | Military | ,                     | -            | -             | 0.000                   | -            | -             | 0.000                   | _         | _             | 0.000                   | -         | -             | 1.017                   | · _       | _             | 0.000                   | -         | -             | 1.017                   |
| Total   |          |                       | -            | -             | 0.000                   | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 1.017                   | -         | -             | 0.000                   | -         | -             | 1.017                   |
| Note: Subtotals or To                             | tale in  | thie E                | whihit P-10a | may not he    | evact or si             | im exactly d | lue to roun   | dina                    |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:<br/>3080F / 03 / 4P-1 Line Item Number / Title:<br/>834010 / General Information TechnologyAggregated Items Title:<br/>Other Professional Education

|   |          |                       |           |               |                         |           | 1             |                         |           |               |                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |               |                         | -         |               |                         |           |               |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|---|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | F         | Prior Year    | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY                                      | 7 2018 Ba     | se                      | F         | Y 2018 OC     | ю                       | F         | / 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost                               | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Other Professional Educ                           | ation    |                       |           |               |                         |           |               |                         |           |               |                         |   |               |                         |           |               |                         |           |               |                         |
| OTHER<br>PROFESSIONAL<br>EDUCATION PE<br>0804752F | A        |                       | -         | -             | -                       | -         | -             | 0.357                   | -         | -             | 0.494                   | -                                       | -             | 0.492                   | -         | -             | 0.000                   | -         | -             | 0.492                   |
| Subtotal: Other Profession                        | onal     |                       | -         | -             | -                       | -         | -             | 0.357                   | -         | -             | 0.494                   | -                                       | -             | 0.492                   | -         | -             | 0.000                   | -         | -             | 0.492                   |
| Total   |          |                       | -         | -             | -                       | -         | -             | 0.357                   | -         | -             | 0.494                   | -                                       | -             | 0.492                   | -         | -             | 0.000                   | -         | -             | 0.492                   |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ems: FY 2018 Air Force                  | Date: May 2017                        |
|---|---|---------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      |   | Aggregated Items Title:               |
| 3080F / 03 / 4  | 834010 / General Information Technology | Support of the Training Establishment |

|                                 |          |                       |           |               |                         |           |               |                         |           |                      |                         | - 0,      |                      |                         |           |               |                         |           |               |                         |
|---------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                 |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017              |                         | FY        | ′ 2018 Ba            | se                      | F         | 2018 OC       | 0                       | FY        | 2018 To       | tal                     |
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                   |          |                       |           |               | ,                       |           |               |                         |           |                      |                         |           |                      |                         | ,         |               |                         |           |               |                         |
| TRAINING SUPPORT<br>PE 0804771F | Α        |                       | -         | -             | -                       | -         | -             | 0.730                   | -         | -                    | 1.016                   | -         | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Subtotal: Uncategorized         |          |                       | -         | -             | -                       | -         | -             | 0.730                   | -         | -                    | 1.016                   | -         | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Total                           |          |                       | -         | -             | -                       | -         | -             | 0.730                   | -         | -                    | 1.016                   | -         | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:<br/>3080F / 03 / 4P-1 Line Item Number / Title:<br/>834010 / General Information TechnologyAggregated Items Title:<br/>Facilities Operation - Administrative

| MDAP |           | rior Year            | s                       |           | FY 2016       |                         |           | FY 2017              |                         | EV          | 7 0040 Da     |                         |                   | 7 2040 00           |                         | EV                      | / 2040 T-4                |                         |
|------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-------------|---------------|-------------------------|-------------------|---------------------|-------------------------|-------------------------|---------------------------|-------------------------|
|      | 9/        |                      |                         |           |               |                         |           | F1 2017              |                         |             | ' 2018 Ba     | se                      | _ F1              | ′ 2018 OC           | ·U                      | FY                      | ′ 2018 Tot                | .aı                     |
| MAIS | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost         | Qty<br>(Each)       | Total<br>Cost<br>(\$ M) | Unit Cost               | Qty<br>(Each)             | Total<br>Cost<br>(\$ M) |
|      |           |                      |                         |           |               |                         | ·         |                      |                         |             |               |                         |                   |                     |                         | ,                       |                           |                         |
|      | -         | -                    | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -           | -             | 0.760                   | -                 | -                   | 0.000                   | -                       | -                         | 0.760                   |
|      | -         | -                    | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -           | -             | 0.760                   | -                 | -                   | 0.000                   | -                       | -                         | 0.760                   |
|      |           |                      |                         |           |               |                         |           |                      |                         |             |               |                         |                   |                     |                         |                         |                           | 0.760                   |
|      |           | -                    |                         |           |               |                         | 0.000     | 0.000 -              | 0.000                   | 0.000 0.000 | 0.000 0.000 - | 0.000 0.000             | 0.000 0.000 0.760 | 0.000 0.000 0.760 - | 0.000 0.000 0.760       | 0.000 0.000 0.760 0.000 | 0.000 0.000 0.760 0.000 - |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:

834010 / General Information Technology

Aggregated Items Title:

AF A1 Systems

| 30001 7 03 7 4  |          |                       |           |               |                         |           |               | 0040101                 | General   | IIIIOIIII     |                         | Jililology |               |                         |           | ı Aı Sy       | 3161113                 |           |               |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY         | ′ 2018 Ba     | se                      | FY        | / 2018 OC     | 0                       | F۱        | 2018 To       | tal                     |
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       | ,         |               |                         |           |               |                         |           |               | ,                       |            |               |                         |           |               |                         |           |               |                         |
| PERSONNEL<br>SERVICE DELIVERY<br>PE 0901299F                                  | A        |                       | -         | -             | -                       | -         | -             | 0.282                   | -         | -             | 0.000                   | -          | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.0                     |
| MILITARY<br>PERSONNEL DATA<br>SYSTEM (MILPDS)                                 | А        |                       | -         | -             | -                       | -         | -             | 0.283                   | -         | -             | 0.536                   | -          | -             | 0.504                   | -         | -             | 0.000                   | -         | -             | 0.5                     |
| REGIONALIZATION<br>OF CIV PERS<br>SUPPORT                                     | А        |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -          | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.0                     |
| AIR FORCE<br>PERSONNEL<br>CENTER  | Α        |                       | -         | -             | -                       | -         | -             | 0.221                   | -         | -             | 0.000                   | -          | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.0                     |
| Air Force Personnel<br>Operations Agency<br>(AFPOA) Network<br>Infrastructure | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 1.065                   | -          | -             | 2.608                   | -         | -             | 0.000                   | -         | -             | 2.6                     |
| Subtotal: Uncategorized   |          |                       | -         | -             | -                       | -         | -             | 0.786                   | -         | -             | 1.601                   | -          | -             | 3.112                   | -         | -             | 0.000                   | -         | -             | 3.1                     |
| Total   |          |                       | -         | -             | -                       | -         | -             | 0.786                   | -         | -             | 1.601                   | -          | -             | 3.112                   | -         | -             | 0.000                   | -         | -             | 3.1                     |

**Date:** May 2017 Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Items Title: 3080F / 03 / 4 Space and Missile Test and Evaluation 834010 / General Information Technology Center

|  |             |                       | F            | Prior Year    | 's                      |              | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | FY        | / 2018 OC     | o                       | F۱        | / 2018 To     | tal                     |
|--|-------------|-----------------------|--------------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]   | ID<br>CD    | MDAP/<br>MAIS<br>Code | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Space and Missile Test a   | nd Ev       | aluation              | Center       |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| RESEARCH AND<br>DEVELOPMENT<br>SPACE AND MISSILE<br>OPERATIONS<br>(RDSMO) (PE<br>1203173F) | A           |                       | -            | -             | -                       | -            | -             | 1.435                   | -         | -             | 1.977                   | -         | -             | 1.964                   | -         | -             | 0.000                   | -         | -             | 1.964                   |
| Subtotal: Space and Miss<br>Evaluation Center  | sile To     | est and               | -            | -             | -                       | -            | -             | 1.435                   | -         | -             | 1.977                   | -         | -             | 1.964                   | -         | -             | 0.000                   |           | _             | 1.964                   |
| Total  | <del></del> |                       | -            | -             | -                       | -            | -             | 1.435                   | -         | -             | 1.977                   | -         | -             | 1.964                   | -         | -             | 0.000                   | -         | -             | 1.964                   |
| Note: Subtotals or Tot   | als in      | this F                | chihit P-40a | may not be    | evact or si             | im exactly c | tue to round  | dina                    |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Due to the creation of a new Major Force Program for Space, funding in this exhibit for this effort from "Prior Years" to FY 2017 was originally budgeted in the PE 0305173F. Funding in this exhibit for this effort from FY 2018 to "Cost to Completion" is budgeted in PE 1203173F.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:
834010 / General Information Technology

Aggregated Items Title:
Space Innovation, Integration and Rapid Technology Development

|  |    |  | Р         | rior Year     | s                       | FY 201    |               |                         | FY 2017   |               |                         | FY 2018 Base |               |                         | FY 2018 OCO |               |                         | FY 2018 Total |               |                         |  |
|--|----|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|--------------|---------------|-------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|--|
| Item Number /<br>Title [DODIC]                                 | ID |  | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |  |
| Space Innovation, Integration and Rapid Techology              |    |  |           |               |                         |           |               |                         |           |               |                         |              |               |                         |             |               |                         |               |               |                         |  |
| Space Innovation,<br>Integration and Rapid<br>Technology       | A  |  | -         | -             | -                       | -         | -             | 1.221                   | -         |               | 1.481                   | -            | -             | 1.661                   | -           |               | 0.000                   | -             | -             | 1.661                   |  |
| Subtotal: Space Innovation,<br>Integration and Rapid Techology |    |  | -         | -             | -                       | -         | -             | 1.221                   | -         | •             | 1.481                   | •            | -             | 1.661                   | -           |               | 0.000                   | -             | -             | 1.661                   |  |
| Total  |    |  | -         | -             | -                       | -         |               | 1.221                   | -         | -             | 1.481                   | -            | -             | 1.661                   | -           | -             | 0.000                   | -             | -             | 1.661                   |  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

Due to the creation of a new Major Force Program for Space, funding in this exhibit for this effort from "Prior Years" to FY 2017 was originally budgeted in the PE 0305174F. Funding in this exhibit for this effort from FY 2018 to "Cost to Completion" is budgeted in PE 1203174F.



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 834040 / AF Global Command & Control Sys

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: 0303150F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior        |                  |                   | FY 2018          | FY 2018         | FY 2018        |                 |                |         |         | То       |        |
|--|--------------|------------------|-------------------|------------------|-----------------|----------------|-----------------|----------------|---------|---------|----------|--------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | осо             | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 7.212            | 15.729            | 3.634            | 0.000           | 3.634          | 6.666           | 4.646          | 4.847   | 4.921   | -        | 47.655 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | -            | 7.212            | 15.729            | 3.634            | 0.000           | 3.634          | 6.666           | 4.646          | 4.847   | 4.921   | -        | 47.655 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | -            | 7.212            | 15.729            | 3.634            | 0.000           | 3.634          | 6.666           | 4.646          | 4.847   | 4.921   | -        | 47.655 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | e corresponding | budget request | s are documente | ed elsewhere.) |         |         |          |        |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -               | -              | -               | -              | -       | -       | - [      | -      |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -               | -              | -               | -              | -       | -       | -        | -      |

## **Description:**

GLOBAL COMMAND AND CONTROL SYSTEM AIR FORCE (GCCS-AF): The GCCS-AF program provides the common AF infrastructure hardware and software necessary to pass AF command and control (C2) data among commands, their components, and the joint GCCS. This program procures GCCS components which include items such as servers, work stations, commercial-off-the-shelf (COTS) software, and associated peripherals to provide users with the full suite of joint baseline capability (including the common operating picture) and AF specific applications such as the Deliberate Crisis Action Planning and Execution Segments (DCAPES) and Logistics Feasibility Analysis Capability (LOGFAC) that feed into the Joint Operations Planning and Execution System (JOPES), GCCS-AF is integrated at the following locations to establish initial and full joint connectivity and operational capability across the spectrum of intelligence, operations, manpower, and logistics: AF-supported war-fighting commands, AF critical sites, Headquarters United States Air Force, Major Command headquarters (MAJCOM), numbered air forces, wings, Air National Guard (ANG) bases, Air Force Reserve (AFR) bases, and remote sites. Each site will comply with current Air Force and Department of Defense (DoD) network initiatives by employing a standardized interface among AF base-level classified C2 networks. AF base-level network control centers, and the joint Defense Information Systems Agency (DISA) Secret Internet Protocol Router Network (SIPRNET). This program provides a flexible open system and distributed C2 architecture necessary to support the ioint GCCS, GCCS supports AF operations by installing and upgrading a site's classified C2 system through extensive use of COTS technology that adheres to AF command and control, communications, and computer architectures and standards.

NOTE: FY2018 reflects a GCCS-AF funding decrease of \$10.223M as this funding was transferred to PE 0207452F (DCAPES) as they assume responsibility for the Strategic Server Enclave (SSE) and Windows baselines for this program.

Funding for the exhibit contained in PE 0303150F: GLOBAL COMMAND AND CONTROL SYSTEM

#### Justification:

GLOBAL COMMAND AND CONTROL SYSTEM AIR FORCE (GCCS-AF): FY18 procurement funding procures various types and quantities of hardware and software in support of installation and unit mission requirements for Air Force personnel. GCCS-AF will procure and install GCCS-Joint (GCCS-J) version 6.0 hardware and software (government-off- the-shelf and commercial-off-the-shelf) at warfighter Combatant Command (CCMD) and MAJCOM locations, providing a full spectrum of command, control, logistics, and intelligence capability from strategic to unit level operations with total joint service connectivity. The GCCS architecture supports functional users on each base and specifically incorporates manpower and logistics functions into GCCS. These fielding activities are consistent with the AF's Air Expeditionary Force (AEF) C2 structure and integration with DoD's emerging next generation joint C2 enabler.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834070 / Mobility Command and Control

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Line item widar/wais code. N/A                 |                |                  |                    |                  |                  |                |                 |                |         |         |          |        |
|--|----------------|------------------|--------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|--------|
|  | Prior          |                  |                    | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |        |
| Resource Summary                               | Years          | FY 2016          | FY 2017            | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 13.062           | 9.814              | 10.083           | 0.000            | 10.083         | 20.868          | 10.447         | 10.634  | 10.827  | -        | 85.735 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | -              | 13.062           | 9.814              | 10.083           | 0.000            | 10.083         | 20.868          | 10.447         | 10.634  | 10.827  | -        | 85.735 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | -              | 13.062           | 9.814              | 10.083           | 0.000            | 10.083         | 20.868          | 10.447         | 10.634  | 10.827  | -        | 85.735 |
| (The following                                 | g Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) |         |         |          |        |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -      |

## **Description:**

AMC Command and Control System PE 0401840F - P-40A PE 0401840F MOBILITY COMMAND AND CONTROL:

GLOBAL MOBILITY COMMAND AND CONTROL (C2) ARCHITECTURE AIR MOBILITY COMMAND (AMC): The AMC C2 architecture is an integrated, command-wide program that supports US Air Force airlift/air refueling missions around the globe with centralized control/decentralized execution. To execute America's Global Reach mission, Air Mobility Command's 618th Air Operations Center (AOC) plans, schedules, and directs a fleet of more than 1,100 mobility aircraft. The 618th AOC operates combat delivery, strategic airlift, air refueling, and aeromedical evacuation operations around the world. Funding for this exhibit contained in program element (PE) 0401840F.

- a. MOBILITY AIR FORCE (MAF) COMMAND AND CONTROL (C2) INFRASTRUCTURE: Provides base wired/wireless infrastructure equipment supporting AMC's 618th AOC and AMC's 12 bases to assure connectivity to AMC's command and control (C2) systems and to ensure they remain operational at AMC bases and operating locations. MAF C2 Infrastructure ensures connectivity with critical Air Force systems such as the Information Transport System (ITS), Global Combat Support System (GCSS) and the Global Decision Support System (GDSS); AMC's C2 systems such as the Consolidated Air Mobility Planning System (CAMPS) and Advanced Computer Flight Planning (ACFP) system and the infrastructure for Land Mobile Radio (LMR) systems across AMC providing intra-base command and control for base security, emergency management, flightline operations/maintenance, and crash response.
- b. DEPLOYED SATELLITE COMMUNICATIONS (DSATCOM): Provides C2 communications capabilities for deployed Mobility C2 forces and mission support team C2 operations. These operations rapidly install mission support communications at austere base locations where communications to support air mobility operations are nonexistent or insufficient. The DSATCOM program is the primary funding vehicle for procuring communications equipment supporting these components. The resources directly support C2 and In-Transit Visibility (ITV) of deployed and enroute personnel, aircraft, and cargo providing critical communications to Contingency Response Groups (CRGs). CRGs are self-sufficient groups of multi-skilled, highly-trained airmen, representing different Air Force specialty codes, who can rapidly deploy anywhere in the world with little notice to open air bases for any follow-on mission. The Hard-side Expandable Lightweight Air Mobile Shelter (HELAMS) is the primary weapon system providing this support. It is a rapidly deployable, self-contained C2/ITV command center. This shelter functions as the base command post during the initial phases of airbase build-up and contains integrated communications equipment such as radios, computers, printers and fax machines. No funding is required for DSATCOM after FY16.

Special Operations Forces PE 0404011F - P-40A PE 0404011F Special Operations Forces:

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834070 / Mobility Command and Control

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

Command and Control (C2) Air Rapid Response Kits (ARRKs) are tailored packages providing temporary base operating support (BOS)(i.e., SOF living facilities, command and control (C2), armory, fuel storage, water purification, and cold weather protection), which allow Air Force Special Operations Forces (AFSOFs) to perform expeditionary deployments to austere environments before conventional/service-common BOS packages become available. FY16 funding totals include \$2M appropriated for Overseas Contingency Operations.

FY16 funding totals include \$2M appropriated for Overseas Contingency Operations.

#### Justification:

AMC Command and Control System PE 0401840F - P-40A PE 0401840F MOBILITY COMMAND AND CONTROL

MOBILITY AIR FORCE (MAF) COMMAND AND CONTROL (C2) INFRASTRUCTURE: FY18 funding continues procurement of wired and wireless base network infrastructure equipment to include cabling, routers, bridges, hubs, repeaters and switches to ensure information technology remains current and interoperability with AMC C2 systems is maintained to meet the needs of the warfighter and AMC's worldwide mobility mission.

DEPLOYED SATCOM (DSATCOM): No funding requested/required for DSATCOM after FY16.

Special Operations Forces PE 0404011F - P-40A PE 0404011F Special Operations Forces: No FY18 funding requested.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834130 / Air Force Physical Security System

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207589F

Other Related Program Elements: 0603287F, 0604287F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior          |                  |                    | FY 2018          | FY 2018          | FY 2018           |                        |                       |                       |                       | То       |                        |
|--|----------------|------------------|--------------------|------------------|------------------|-------------------|------------------------|-----------------------|-----------------------|-----------------------|----------|------------------------|
| Resource Summary                               | Years          | FY 2016          | FY 2017            | Base             | oco              | Total             | FY 2019                | FY 2020               | FY 2021               | FY 2022               | Complete | Total                  |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                 | -                      | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 98.533           | 327.560            | 201.866          | 3.000            | 204.866           | 100.090 <sup>(a)</sup> | 83.950 <sup>(b)</sup> | 57.921 <sup>(c)</sup> | 58.966 <sup>(d)</sup> | -        | 931.886 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                 | -                      | -                     | -                     | -                     | -        | -                      |
| Net Procurement (P-1) (\$ in Millions)         | -              | 98.533           | 327.560            | 201.866          | 3.000            | 204.866           | 100.090                | 83.950                | 57.921                | 58.966                | -        | 931.886                |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                 | -                      | -                     | -                     | -                     | -        | -                      |
| Total Obligation Authority (\$ in Millions)    | -              | 98.533           | 327.560            | 201.866          | 3.000            | 204.866           | 100.090                | 83.950                | 57.921                | 58.966                | -        | 931.886                |
| (The following                                 | g Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | g budget request: | s are documente        | ed elsewhere.)        |                       |                       | ĺ        |                        |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                 | -                      | -                     | -                     | -                     | -        | -                      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                  | -                | -                | -                 | -                      | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                 | -                      | -                     | -                     | -                     | -        | -                      |

#### **Description:**

PE 0101122F Air-Launched Cruise Missile (ALCM) - P-40A

PE 0101122F - AIR LAUNCHED CRUISE MISSILE (ALCM) SECURITY SYSTEMS includes commodity security equipment including intrusion detection sensors, alarm annunciators, and surveillance systems required for nuclear warhead storage locations.

PE 0101213F Minuteman Squadrons - P-40A

PE 0101213F MINUTEMAN SQUADRONS/Minuteman Security Equipment includes commodity security equipment including intrusion detection sensors, alarm annunciators, and surveillance systems required for nuclear warhead storage locations.

#### PE 0207588F Air Base Ground Defense - P-40A

Air Base Ground Defense (ABGD) will procure automated tactical/expeditionary equipment that is required to provide robust force protection capabilities worldwide; flight-line security, aircraft, intelligence, surveillance, and reconnaissance assets, critical infrastructure, sustained sortie generation and air operations, advanced technology force multipliers to include: night vision and thermal imagery equipment, counter sniper/battery capabilities, ground weapons, target acquisition radar, inter operable tactical communications, [required C3 and protective standoff equipment for]wheeled tactical [non-tactical], armored [un-armored] vehicles, tactical sensors systems, and unit/personnel protective field equipment.

FY17 \$15M Request for Additional Appropriations (RAA) Enhanced AB Detection Systems, consisting of advanced TASS, indirect fire detection and base warning systems.

#### PE 0207589F Base Physical Security Systems (BPSS)

BPSS programs include the Integrated Base Defense Security System programs (IBDSS and various acquisition blocks), and Counter-Small UAS capabilities. These activities do the following: reduces the risk to AF personnel; nuclear (PL-1N), and non-nuclear (PL 1-4) assets (weapon systems, aircraft, command & control systems, etc.) and facilities (hangars, SCIFs, etc.) at AF and ANG installations globally. DoD downsizing, reductions in forward basing, and aircraft technology advances evolved AF weapons systems into increasingly valuable national power projection capabilities. However, the security afforded most AF aircraft, weapon systems, other critical resources, and associated personnel and facilities in terms of equipment or manpower has not kept pace with the changing world environment, state-of-the-art technology and potential threats. The emergence of Remotely Piloted Aircraft (RPA) has led to additional command, control and communications nodes that require commensurate protection level security efforts to enable effective Air Force power projection. Force Protection BPSS projects support long-term physical security requirements which allow installation commanders and security forces to adapt to, and counter, enduring and emergent threats to high priority assets in accordance with home station and the Aerospace Expeditionary Force concept.

LI 834130 - Air Force Physical Security System Air Force

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P-1 Line #29

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 4: Spcl Comm-Electronics Projects

Date: May 2017

P-1 Line Item Number / Title:
834130 / Air Force Physical Security System

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: 0207589F Other Related Program Elements: 0603287F, 0604287F

Line Item MDAP/MAIS Code: N/A

PE 0208047F Antiterrorism - P-40A PE 0208047F: ANTI-TERRORISM

Tactical and Expeditionary Security Systems: FY18 funds antiterrorism activities for the Air Force. Primarily, this line funds the Air Force's only perimeter installation access control system, the Defense Biometrics Identification System (DBIDS). This line also funds mitigation efforts for Air Force vulnerabilities identified in Air Force and Joint higher headquarters inspections and vulnerability assessments, procurement of intrusion detection systems which greatly enhance the effectiveness of AF antiterrorism program efforts to detect, deter, and defend service members, civilian employees, family members, facilities, and other AF resources around the globe against terrorist attacks.

PE 0208534F Command Support - Tactical Air Forces - P-40A Funding is required for Command Support for Tactical Air Forces.

PE 0502625F Air Base Security Forces (ANG) - P-40A

PE52625F Air Base Security Forces (ANG) is required for Battlefield Airman and includes Security Forces, Guardian Angels, Special Tactics, and Terminal Air Controllers. The items required include communication equipment, situational awareness equipment, personal protective equipment, night vision devices, weapons and weapons accessories, training devices, and explosive detection equipment. In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834130 / Air Force Physical Security System

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207589F

Other Related Program Elements: 0603287F, 0604287F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Exhibits Schedule  |             | -        |                       | <b>Prior Years</b>                        | FY 2016                                   | FY 2017                                   | FY 2018 Base                              | FY 2018 OCO                               | FY 2018 Total                             |
|--|--|-------------|----------|-----------------------|---|---|---|---|---|---|
| Exhibit<br>Type                        | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M)  |
| P-40a                                  | Air-Launched Cruise Missile (ALCM)   |             |          |                       | - / -                                     | - /1.908                                  | - /1.710                                  | - / 1.757                                 | - / 0.000                                 | - / 1.757                                 |
| P-40a                                  | Minuteman Squadrons  |             |          |                       | - / -                                     | - / 0.814                                 | - / 0.730                                 | - / 0.751                                 | - / 0.000                                 | - / 0.751                                 |
| P-40a                                  | Air Base Ground Defense  |             |          |                       | - / -                                     | - / 23.420                                | - / 27.147                                | - /4.774                                  | - / 0.000                                 | - / 4.774                                 |
| P-40a                                  | Base Physical Security Systems   |             |          |                       | - / 0.000                                 | - / 0.000                                 | - /76.000                                 | - / 0.000                                 | - / 0.000                                 | - / 0.000                                 |
| P-3a                                   | 1 / Base Physical Security Systems (Capability Improvement)  |             |          |                       | - / -                                     | - / 63.291                                | - / 18.613                                | - / 34.408                                | - / 0.000                                 | - / 34.408                                |
| P-3a                                   | 2 / Counter small - UAS (Capability Improvement)   |             |          |                       | - / -                                     | - / 0.000                                 | - /70.500                                 | - / 136.000                               | - / 0.000                                 | - / 136.000                               |
| P-3a                                   | 3 / IBDSS-1 (Capability Improvement)   |             |          |                       | - / -                                     | - / 0.000                                 | - / 65.869                                | - / 16.029                                | - / 0.000                                 | - / 16.029                                |
| P-40a                                  | Antiterrorism  |             |          |                       | - / -                                     | - / 9.100                                 | - /7.891                                  | - /8.147                                  | - / 0.000                                 | - / 8.147                                 |
| P-40a                                  | Command Support - Tactical Air Forces  |             |          |                       | - / -                                     | - / 0.000                                 | - /0.000                                  | - / 0.000                                 | - /3.000                                  | - /3.000                                  |
| P-40a                                  | Air Base Security Forces (ANG)   |             |          |                       | - / -                                     | - / 0.000                                 | - / 59.100                                | - / 0.000                                 | - / 0.000                                 | - / 0.000                                 |
| P-40                                   | Total Gross/Weapon System Cost   |             |          |                       | - 1 -                                     | - / 98.533                                | - / 327.560                               | - / 201.866                               | - / 3.000                                 | - / 204.866                               |
|  | Exhibits Schedule  |             |          |                       | FY 2019                                   | FY 2020                                   | FY 2021                                   | FY 2022                                   | To Complete                               | Total                                     |
| Exhibit<br>Type                        | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M)  |
| P-40a                                  | Air-Launched Cruise Missile (ALCM)   |             |          |                       | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     |
| P-40a                                  | Minuteman Squadrons  |             |          |                       | ,   |   |   |   |   | - / -                                     |
| P-40a                                  |  |             |          |                       | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     |
| 1 - <del>4</del> 0a                    | Air Base Ground Defense  |             |          |                       | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     |
| P-40a                                  | Air Base Ground Defense Base Physical Security Systems   |             |          |                       |   | ·   |   |   |   | <u>-</u>                                  |
|  |  |             |          |                       | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     |
| P-40a                                  | Base Physical Security Systems   |             |          |                       | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     | - / -                                     |
| P-40a<br>P-3a                          | Base Physical Security Systems  1 / Base Physical Security Systems (Capability Improvement)  |             |          |                       | - / -<br>- / -<br>- / -                   |
| P-40a<br>P-3a<br>P-3a                  | Base Physical Security Systems  1 / Base Physical Security Systems (Capability Improvement)  2 / Counter small - UAS (Capability Improvement)  |             |          |                       | - / -<br>- / -<br>- / -<br>- / -          | - / -<br>- / -<br>- / -<br>- / -          | - / -<br>- / -<br>- / -<br>- / -          | - / -<br>- / -<br>- / -<br>- / -          | - / -<br>- / -<br>- / -                   | - / -<br>- / -<br>- / -<br>- / -          |
| P-40a<br>P-3a<br>P-3a<br>P-3a          | Base Physical Security Systems  1 / Base Physical Security Systems (Capability Improvement)  2 / Counter small - UAS (Capability Improvement)  3 / IBDSS-1 (Capability Improvement)                |             |          |                       | - 1 -<br>- 1 -<br>- 1 -<br>- 1 -          | - 1 -<br>- 1 -<br>- 1 -<br>- 1 -          | - / -<br>- / -<br>- / -<br>- / -          | - 1 -<br>- 1 -<br>- 1 -<br>- 1 -          | - / -<br>- / -<br>- / -<br>- / -          | - 1 -<br>- 1 -<br>- 1 -<br>- 1 -          |
| P-40a<br>P-3a<br>P-3a<br>P-3a<br>P-40a | Base Physical Security Systems  1 / Base Physical Security Systems (Capability Improvement)  2 / Counter small - UAS (Capability Improvement)  3 / IBDSS-1 (Capability Improvement)  Antiterrorism |             |          |                       | - 1 -<br>- 1 -<br>- 1 -<br>- 1 -<br>- 1 - | - / -<br>- / -<br>- / -<br>- / -<br>- / - | - / -<br>- / -<br>- / -<br>- / -<br>- / - | - 1 -<br>- 1 -<br>- 1 -<br>- 1 -<br>- 1 - | - / -<br>- / -<br>- / -<br>- / -<br>- / - | - 1 -<br>- 1 -<br>- 1 -<br>- 1 -<br>- 1 - |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

This program, Air Force Physical Security System P-40A Item New Item, is a new start.

PE 0101122F Air-Launched Cruise Missile (ALCM) - P-40A

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

## Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834130 / Air Force Physical Security System

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207589F

Other Related Program Elements: 0603287F, 0604287F

Line Item MDAP/MAIS Code: N/A

PE 0101122F - AIR LAUNCHED CRUISE MISSILE (ALCM) SECURITY SYSTEMS: FY18 funding procures commodity security equipment including intrusion detection sensors, alarm annunciators, and surveillance systems required for nuclear warhead storage locations.

PE 0101213F Minuteman Squadrons - P-40A

ID Code (A=Service Ready, B=Not Service Ready): A

PE 0101213F MINUTEMAN SQUADRONS/Minuteman Security Equipment: FY17 funding procures commodity security equipment including intrusion detection sensors, alarm annunciators, and surveillance systems required for nuclear warhead storage locations.

PE 0207588F Air Base Ground Defense - P-40A

Air Base Ground Defense. (ABGD): FY17 (OCO) funding will procure fixed site Intrusion Detection Systems (IDS) at Al Dhafra AB.

Air Base Ground Defense, (ABGD): FY18 funds automated tactical/expeditionary equipment that is required to provide robust force protection capabilities worldwide; flight-line security, aircraft, intelligence, surveillance, and reconnaissance assets, critical infrastructure, sustained sortie generation and air operations, advanced technology force multipliers to include: night vision and thermal imagery equipment, counter spiper/battery capabilities, ground weapons, target acquisition radar, inter operable tactical communications, frequired C3 and protective standoff equipment for wheeled tactical fron-tactical, armored [un-armored] vehicles, tactical sensors systems, and unit/personnel protective field equipment,.

PE 0207589F Base Physical Security Systems (BPSS)

FY18 funding procures BPSS programs to include the Integrated Base Defense Security System programs (IBDSS and various acquisition blocks), and Counter-Small UAS capabilities. These activities do the following: reduces the risk to AF personnel; nuclear (PL-1N), and non-nuclear (PL 1-4) assets (weapon systems, aircraft, command & control systems, etc.) and facilities (hangars, SCIFs, etc.) at AF and ANG installations globally. DoD downsizing, reductions in forward basing, and aircraft technology advances evolved AF weapons systems into increasingly valuable national power projection capabilities. However, the security afforded most AF aircraft, weapon systems, other critical resources, and associated personnel and facilities in terms of equipment or manpower has not kept pace with the changing world environment, state-of-the-art technology and potential threats. The emergence of Remotely Piloted Aircraft (RPA) has led to additional command, control and communications nodes that require commensurate protection level security efforts to enable effective Air Force power projection. Force Protection BPSS projects support long-term physical security requirements which allow installation commanders and security forces to adapt to, and counter, enduring and emergent threats to high priority assets in accordance with home station and the Aerospace Expeditionary Force concept.

PE 0208047F Antiterrorism - P-40A

PE 0208047F: ANTI-TERRORISM

Tactical and Expeditionary Security Systems: FY18 funds antiterrorism activities for the Air Force (AF). Primarily, this line funds the AF's only perimeter installation access control system, the Defense Biometrics Identification System (DBIDS). It also funds mitigation efforts for AF vulnerabilities identified in AF and Joint higher headquarters inspections and Vulnerability Assessments (VAs), procurement of intrusion detection systems which greatly enhance the effectiveness of AF antiterrorism program efforts to detect, deter, and defend service members, civilian employees, family members, facilities, and other AF resources around the globe against terrorist attacks.

PE 0208534F Command Support - Tactical Air Forces - P-40A

FY18 funding is required to procure items for Command Support for Tactical Air Forces. Requesting \$3m in Overseas Contingency Operations (OCO) funds.

PE 0502625F Air Base Security Forces (ANG) - P-40A

No FY18 funding requested.

Efforts with funding starting in FY 2019 through FY 2022 are summarized on the P-40. Not all details of this funding are included in this P-40 exhibit set. A summary of the excepted details is as follows:

(a) FY 2019 Cost Delta: 100.090 million

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| Exhibit P-40, Budget Line Item Justificatio  | n: FY 2018 Air Force                  | <b>Date</b> : May 2017                         |  |  |  |  |  |
|--|---------------------------------------|--|--|--|--|--|--|
| Appropriation / Budget Activity / Budget S<br>3080F: Other Procurement, Air Force / BA 03<br>Equip / BSA 4: Spcl Comm-Electronics Projec | 3: Electronics and Telecommunications | <b>P-1 Line Item Nun</b><br>834130 / Air Force | nber / Title:<br>Physical Security System          |  |  |  |  |
| D Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B Ite       | <b>ms</b> : 0207589F                           | Other Related Program Elements: 0603287F, 0604287F |  |  |  |  |
| ine Item MDAP/MAIS Code: N/A   |                                       |  |  |  |  |  |  |
|  |                                       | (b) FY 2020 Cost Delta                         | a: 83.950 million                                  |  |  |  |  |
|  |                                       | (c) FY 2021 Cost Delta                         |  |  |  |  |  |
|  |                                       | (d) FY 2022 Cost Delta                         |  |  |  |  |  |
|  |                                       | (e) FY Total Cost Delta                        | a: 931.886 million                                 |  |  |  |  |
|  |                                       |  |  |  |  |  |  |
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LI 834130 - Air Force Physical Security System Air Force

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:

834130 / Air Force Physical Security System

Aggregated Items Title:

Air-Launched Cruise Missile (ALCM)

|  |   |                       |           |               |                         |           |               |                         |           | - , -         |                         | -, -, -   | -             |                         |           |               |                         |           | - (           | ,                       |
|--|---|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |   |                       | F         | Prior Year    | 's                      |           | FY 2016       | 1                       |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | F         | Y 2018 OC     | ю                       | FY        | / 2018 Tot    | al                      |
| Item Number /<br>Title [DODIC]                               | ID<br>CD  | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized  |   |                       |           | ,             |                         |           |               |                         |           |               |                         |           |               |                         | ,         |               |                         |           |               |                         |
| AIR LAUNCHED<br>CRUISE MISSILE<br>(ALCM) SECURITY<br>SYSTEMS | A   |                       | -         | -             | -                       | -         | -             | 1.908                   | -         | -             | 1.710                   | -         | -             | 1.757                   | -         | -             | 0.000                   | -         | -             | 1.757                   |
| Subtotal: Uncategorized                                      |   |                       | -         | -             | -                       | -         | -             | 1.908                   | -         | -             | 1.710                   | -         | -             | 1.757                   | -         | -             | 0.000                   | -         | -             | 1.757                   |
| Total  |   |                       | -         | -             | -                       | -         | -             | 1.908                   | -         | -             | 1.710                   | -         | -             | 1.757                   | -         | -             | 0.000                   | -         | -             | 1.757                   |
| Note: Cubtotale or To  | Subtotals or Totals in this Euklibit D 40s may not be executed a rounding |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite           | ems: FY 2018 Air Force   | Date: May 2017                              |
|---|--|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 | P-1 Line Item Number / Title:<br>834130 / Air Force Physical Security System | Aggregated Items Title: Minuteman Squadrons |

|                                 |          |                       |           |                      |                         |           |                      | The state of the s |           |                      |                         |           |                      |                         | 1         |                      |                         |           |               |                         |
|---------------------------------|----------|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|--|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
|                                 |          |                       | Р         | rior Year            | s                       |           | FY 2016              |  |           | FY 2017              |                         | FY        | ′ 2018 Ba            | se                      | FY        | / 2018 OC            | 0                       | FY        | 2018 To       | tal                     |
| Item Number /<br>Title [DODIC]  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M)  | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                   |          |                       | ,         |                      | ,                       |           |                      |  |           |                      | ,                       | ,         |                      |                         |           | ,                    | ,                       |           |               |                         |
| Minuteman Security<br>Equipment | A        |                       | -         | -                    | -                       | -         | -                    | 0.814  | -         | -                    | 0.730                   | -         | -                    | 0.751                   | -         | -                    | 0.000                   | -         | -             | 0.751                   |
| Subtotal: Uncategorized         |          |                       | -         | -                    | -                       | -         | -                    | 0.814  | -         | -                    | 0.730                   | -         | -                    | 0.751                   | -         | -                    | 0.000                   | -         | -             | 0.751                   |
| Total                           |          |                       | -         | -                    | -                       | -         | -                    | 0.814  | -         | -                    | 0.730                   | -         | -                    | 0.751                   | -         | -                    | 0.000                   | -         | -             | 0.751                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:

834130 / Air Force Physical Security System

Aggregated Items Title:
Air Base Ground Defense

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|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|---|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | P         | rior Year     | s                       |           | FY 2016       | i                       |   | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | / 2018 OC            | 0                       | F         | / 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]           | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                            |          |                       |           |               |                         |           |               |                         |   |               |                         |           |               |                         |           |                      |                         |           |               |                         |
| Air Force Tactical<br>Security Equipment | А        |                       | -         | -             | -                       | 23.420    | 1             | 23.420                  | -   | -             | 12.147                  | -         | -             | 4.774                   | -         | -                    | 0.000                   | -         | -             | 4.774                   |
| enhanced AB<br>Detection Systems         | A        |                       | -         | -             | -                       | -         | -             | -                       | 1.000   | 15            | 15.000                  | -         | -             | -                       | -         | -                    | 0.000                   | -         | -             | 0.000                   |
| Subtotal: Uncategorized                  |          |                       | -         | -             | -                       | -         | -             | 23.420                  | -   | -             | 27.147                  | -         | -             | 4.774                   | -         | -                    | 0.000                   | -         | -             | 4.774                   |
| Total                                    |          |                       | -         | -             | -                       | -         | -             | 23.420                  | -   | -             | 27.147                  | -         | -             | 4.774                   | -         | -                    | 0.000                   | -         | -             | 4.774                   |

| Exhibit P-40a, Budget Item Justification For Aggregated Mo | odification Items: FY 2018 Air Force        | Date: May 2017                       |
|--|---|--------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:     | P-1 Line Item Number / Title:               | Aggregated Modification Items Title: |
| 3080F / 03 / 4   | 834130 / Air Force Physical Security System | Base Physical Security Systems       |

|    |      |           | FY 2016          |                                 |  |  |   | FY   | ′ 2018 Ba  | se   | FY   | / 2018 OC  | 0  | FY   | 2018 To  | tal  |   |   |  |
|----|------|-----------|------------------|---------------------------------|--|--|---|--|--|--|--|--|--|--|--|--|---|---|--|
| ID | MAIS | Unit Cost | Qty<br>(Each)    | Total<br>Cost<br>(\$ M)         | Unit Cost  | Qty<br>(Each)  | Total<br>Cost<br>(\$ M)   | Unit Cost  | Qty<br>(Each)  | Total<br>Cost<br>(\$ M)  | Unit Cost  | Qty<br>(Each)  | Total<br>Cost<br>(\$ M)  | Unit Cost  | Qty<br>(Each)  | Total<br>Cost<br>(\$ M)  | Unit Cost   | Qty<br>(Each)   | Total<br>Cost<br>(\$ M)  |
|    |      | -         | -                | -                               | -  | -  | -   | -  | -  | 76.000   | -  | -  | -  | -  | -  | -  | -   | -   | -  |
|    |      | -         | -                | 0.000                           | -  | -  | 0.000   | -  | -  | 76.000   | -  | -  | 0.000  | -  | -  | 0.000  | -   | -   | 0.000  |
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Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

## **Modification Information:**

| Item Number / Title | Models of Systems Affected | Modification Type      |
|---------------------|----------------------------|------------------------|
| EUJUON / EUCOM JUON | Bases                      | Capability Improvement |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force              |  | Date: May 2017  |
|---|--|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 | P-1 Line Item Number / Title:<br>834130 / Air Force Physical Security System | Modification Number / Title: 1 / Base Physical Security Systems |
|   |  |   |

| ID Code (A=Service Ready, B=Not Service Ready) | :              |                  |                    |                  |                  | MDAP/MA          | IS Code:        |                |          |          |                |       |
|--|----------------|------------------|--------------------|------------------|------------------|------------------|-----------------|----------------|----------|----------|----------------|-------|
| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017            | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021  | FY 2022  | To<br>Complete | Total |
|  | 10013          | 1 1 2010         | 1 1 2017           | Dusc             | 000              | Total            | 1 1 2010        | 1 1 2020       | 1 1 2021 | 1 1 2022 | Complete       | Total |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                | -               | -              | -        | -        | -              | -     |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 63.291           | 18.613             | 34.408           | 0.000            | 34.408           | -               | -              | -        | -        | -              | -     |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -        | -        | -              | -     |
| Net Procurement (P-1) (\$ in Millions)         | -              | 63.291           | 18.613             | 34.408           | 0.000            | 34.408           | -               | -              | -        | -        | -              | -     |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -        | -        | -              | -     |
| Total Obligation Authority (\$ in Millions)    | -              | 63.291           | 18.613             | 34.408           | 0.000            | 34.408           | -               | -              | -        | -        | -              | -     |
| (The following                                 | Resource Sum   | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |          | ===      |                |       |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                | -               | -              | -        | -        | -              | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                | -               | -              | -        | -        | -              | -     |

#### **Description:**

INTEGRATED BASE DEFENSE SECURITY SYSTEM (IBDSS): Reduces the risk to AF personnel; nuclear (PL-1N), and non-nuclear (PL 1-4) assets (weapon systems, aircraft, command & control systems, etc.) and facilities (hangars, SCIFs, etc.) at AF and ANG installations globally. DoD downsizing, reductions in forward basing, and aircraft technology advances evolved AF weapons systems into increasingly valuable national power projection capabilities. However, the security afforded most AF aircraft, weapon systems, other critical resources, and associated personnel and facilities in terms of equipment or manpower has not kept pace with the changing world environment, state-of-the-art technology and potential threats. The emergence of Remotely Piloted Aircraft (RPA) has led to additional command, control and communications nodes that require commensurate protection level security efforts to enable effective Air Force power projection. Force Protection BPSS projects support long-term physical security requirements which allow installation commanders and security forces to adapt to, and counter, enduring and emergent threats to high priority assets in accordance with home station and the Aerospace Expeditionary Force concept. This continuing effort was previously named Base Physical Security Systems and is not a New Start.

INTEGRATED BASE DEFENSE SECURITY SYSTEM (IBDSS): FY18 Funding is provided for procurement, design & engineering, modeling & simulation, infrastructure and allied support, installation, integration, training, acceptance testing, Interim Contractor Support (ICS) and interim spares for Base Physical Security Systems (BPSS) Intrusion Detection Systems (IDS). The funding also procures, installs and sustains a variety of electronic security alarms, sensors, and related systems to detect and provide early warning of potential threats against Air Force Protection Level (PL) 1,2,3, and 4 mission critical assets. Funding also supports the Nuclear (PL-1N) Weapon Storage Areas (WSAs) located throughout the CONUS and vault storage areas at main operating bases in Europe to meet long term physical security requirements in the face of enduring and emerging threats. This also includes upgrading existing system to ensure required capability for vault storage areas and associated intrusion detection, access control and assessment systems requirements, In Accordance With (IAW) USAF, EUCOM and NATO/SHAPE requirements. The funds also provide for upgrades, refurbishment, replacement or installation of new fences (required for sensor platforms) and/or lighting systems (to support the surveillance/assessment functions). Due to world-wide operational mission events, quantities are subject to change.

We are currently restructuring IBDSS into discrete block upgrades.

Milestone/Development Status

For Force Protection Commercial Off The Shelf (FP COTS) market research, evaluation and testing. The FP COTS testing applies to all available technologies (delay, denial, detection, assessment, communication display, access control and power) which are considered effective for AF physical security use. This program supports the maintenance and test support at Site C 3 and the Cold Weather Test Site (CWTS), as annotated in DoD Directive 3200.11, listing the 46th Test Wing (TW) as a Major Range and Test facility, conducting developmental and operational testing as the primary mission.

Continuing COTS and Modified COTS for system equipment as it becomes obsolete.

UNCLASSIFIED
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| Exhibit P-3a, Individual Modification: FY 2018 Air Force              |  | Date: May 2017  |
|---|--|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 | P-1 Line Item Number / Title:<br>834130 / Air Force Physical Security System | Modification Number / Title: 1 / Base Physical Security Systems |

| ID Code (A=Service Ready, B=Not Service Ready):      |                                   |                                   |                                   |                                   | MD                                | AP/MAIS Co                        | ode:                              |                                   |                                   |                                   |                                   |                                  |
|--|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| Models of Systems Affected: Bases                    |                                   | Modifi                            | cation Typ                        | <b>pe:</b> Capabil                | ity Improve                       | ement                             | Re                                | lated RDT                         | <b>&amp;E PEs</b> : 0             | 603287F, (                        | 0604287F                          |                                  |
|  | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                            |
| Financial Plan                                       | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M |
| Procurement  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Modification Item 1 of 1: Physical Security Systems  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| B Kits   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Recurring  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Physical Security Systems:EQUIPMENT Group B (Active) | - 1 -                             | 11 / 4.025                        | 2 / 4.071                         | 2 / 7.994                         | - 1 -                             | 2 / 7.994                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Recurring                                  | - / -                             | - /4.025                          | - /4.071                          | - /7.994                          | - / -                             | - /7.994                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: Physical Security Systems                  | - / -                             | - /4.025                          | - /4.071                          | - /7.994                          | - / -                             | - /7.994                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: Procurement, All Modification Items        | - / -                             | - /4.025                          | - /4.071                          | - /7.994                          | - / -                             | - /7.994                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Support (All Modification Items)                     |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| A&AS   | - 1 -                             | 0 / 2.154                         | - / 0.000                         | 0 / 0.000                         | - 1 -                             | 0 / 0.000                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| PMA - Contractor Services                            | - 1 -                             | 0 / 3.250                         | - /0.000                          | 0 / 0.000                         | - 1 -                             | 0 / 0.000                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - / -                             | - 1 -                            |
| PMA - Other Gov't Costs                              | - 1 -                             | 0 / 0.446                         | - / 0.000                         | 0 / 0.000                         | - 1 -                             | 0 / 0.000                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| ICS-Labor  | - 1 -                             | 0 / 3.667                         | - 12.328                          | 0/2.433                           | - 1 -                             | 0/2.433                           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Support                                    | - / -                             | 0/9.517                           | - /2.328                          | 0/2.433                           | - / -                             | 0/2.433                           | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Installation   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Modification Item 1 of 1: Physical Security Systems  | - 1 -                             | 11 / 49.749                       | 2 / 12.214                        | 2 / 23.981                        | - 1 -                             | 2 / 23.981                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Installation                               | - / -                             | 11 / 49.749                       | 2 / 12.214                        | 2 / 23.981                        | - / -                             | 2 / 23.981                        | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Total  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Total Cost (Procurement + Support + Installation)    | -                                 | 63.291                            | 18.613                            | 34.408                            | 0.000                             | 34.408                            | -                                 | _                                 | _                                 | _                                 | _                                 | _                                |

| Exhibit P-3a, Indiv                  | ridual Modification: FY      | 2018 Air Force  |   |   |            | Date: May 2017                         |         |
|--------------------------------------|------------------------------|-----------------|---|---|------------|--|---------|
| Appropriation / Bu<br>3080F / 03 / 4 | udget Activity / Budge       | t Sub Activity: | P-1 Line Item Nun<br>834130 / Air Force | nber / Title:<br>Physical Security Syst | em         | Modification Numb 1 / Base Physical Se |         |
| ID Code (A=Service Ready             | , B=Not Service Ready):      |                 |   | MDAP/MAIS C                             | ode:       |  |         |
| Modification Item 1 of               | 1: Physical Security Systems | i               |   |   |            |  |         |
| Manufacturer Informat                | ion                          |                 |   |   |            |  |         |
| Manufacturer Name: Co                | mmercial Off The Shelf       |                 |   | Manufacturer Location: M                | lultiple   |  |         |
| Administrative Leadtime              | (in Months): 3               |                 |   | Production Leadtime (in I               | Months): 8 |  |         |
| Dates                                | FY 2016                      | FY 2017         | FY 2018                                 | FY 2019                                 | FY 2020    | FY 2021                                | FY 2022 |
| Contract Dates                       | Jan 2016                     | Jan 2017        | Jan 2018                                |   |            |  |         |

Sep 2018

Sep 2017

## Installation Information

Delivery Dates

Method of Implementation: Contract Field Team

Sep 2016

| mounds or impromonitation contact | 011.010.100                       |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|                                   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                             |
| Installation Cost                 | Qty (Each) I<br>Total Cost (\$ M) |
| Prior Years                       | - 1 -                             | - 1 -                             | - 1 -                             | - / -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - / -                             | - 1 -                             |
| FY 2016                           | - 1 -                             | 11 / 49.749                       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2017                           | - 1 -                             | - 1 -                             | 2 / 12.214                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2018                           | - 1 -                             | - 1 -                             | - 1 -                             | 2 / 23.981                        | - 1 -                             | 2 / 23.981                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2019                           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2020                           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2021                           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2022                           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| To Complete                       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| Total                             | - 1 -                             | 11 / 49.749                       | 2 / 12.214                        | 2 / 23.981                        | - 1 -                             | 2 / 23.981                        | - 1 -                             | - / -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |

## Installation Schedule

|     |     |    | FY 2 | 2016 | _  |    | FY 2 | 2017 |    |    | FY 2 | 2018 | _  |    | FY 2 | 2019 |    |    | FY 2 | 2020 |    |    | FY 2 | 2021 |    |    | FY 2 | 2022 |    |    |     |
|-----|-----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|-----|
|     | PYS | Q1 | Q2   | Q3   | Q4 | тс | Tot |
| In  | 0   | -  | 2    | 7    | 2  | -  | 2    | -    | -  | 2  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | 0  | 15  |
| Out | 0   | -  | 2    | 7    | 2  | -  | 2    | -    | -  | 2  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | 0  | 15  |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force | Date: May 2017  |
|--|---|
|  | Modification Number / Title:<br>2 / Counter small - UAS |

| ID Code (A=Service Ready, B=Not Service Ready) | :              |                  |                    |                  |                  | MDAP/MA          | IS Code:        |                |         |         |                |       |
|--|----------------|------------------|--------------------|------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|-------|
| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017            | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 0.000            | 70.500             | 136.000          | 0.000            | 136.000          | -               | -              | -       | -       | -              | -     |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Net Procurement (P-1) (\$ in Millions)         | -              | 0.000            | 70.500             | 136.000          | 0.000            | 136.000          | -               | -              | -       | -       | -              | -     |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Total Obligation Authority (\$ in Millions)    | -              | 0.000            | 70.500             | 136.000          | 0.000            | 136.000          | -               | -              | -       | -       | -              | -     |
| (The following                                 | Resource Sum   | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) | i       |         |                |       |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -     |

#### **Description:**

Counter Small Unmanned Aerial Systems (CsUAS) Joint Emergent Operational Need (JEON)is a rapid acquisition and deployment capability existing of full kill (detect, track, assess and defeat with various capabilities (fixed, mobile, portable and hand-held.) It is a layered system-of-systems using COTS technologies, integrated via GOTS C2 system.

Counter Small Unmanned Aerial Systems (CsUAS): FY18 Funding is provided for procurement, integration and installation of Mobile and Fixed Site.

Milestone/Development Status

Counter Small Unmanned Aerial Systems (CsUAS) JEON: Commercial off the Shelf (COTS) market research, evaluation, testing and integration. The testing applies to all available technologies (detect, track, assessment, defeat and C2 integration) which are considered effective for CsUAS use.

P-1 Line #29

Exhibit P-3a, Individual Modification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:
834130 / Air Force Physical Security System

Date: May 2017

Modification Number / Title:
2 / Counter small - UAS

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

| ID Code (A=Service Ready, B=Not Service Ready) .  |                                   |                                   |                                   |                                   | IVID                              | AF/IVIAIS CO                      | Jue.                              |                                   |                                   |                                   |                                   |                                  |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| Models of Systems Affected: Bases                 |                                   | Modifi                            | cation Typ                        | e: Capabil                        | ity Improve                       | ement                             | Re                                | lated RDT                         | <b>&amp;E PEs</b> : 0             | 604287F, (                        | 0207589F                          |                                  |
|   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                            |
| Financial Plan                                    | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ I |
| RDT&E PE #  |                                   |                                   |                                   |                                   |                                   |                                   |                                   | •                                 |                                   |                                   | •                                 |                                  |
| 0207589F  | - 1 -                             | - 1 -                             | - / 16.000                        | - / 10.500                        | - 1 -                             | - / 10.500                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Procurement                                       |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Modification Item 1 of 1: UAS CSUAS1              |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| B Kits  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Recurring   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| UAS CSUAS1:EQUIPMENT Group B (Active)             | - 1 -                             | - 1 -                             | 3 / 59.925                        | 16 / 90.050                       | - 1 -                             | 16 / 90.050                       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Recurring                               | - / -                             | - / -                             | - /59.925                         | - /90.050                         | - / -                             | - /90.050                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: UAS CSUAS1                              | - / -                             | - / -                             | - /59.925                         | - /90.050                         | - / -                             | - /90.050                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: Procurement, All Modification Items     | - / -                             | - / -                             | - /59.925                         | - /90.050                         | - / -                             | - /90.050                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Support (All Modification Items)                  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| OTHER GOVT  | - 1 -                             | - 1 -                             | - 1 -                             | - /1.174                          | - 1 -                             | - /1.174                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| A&AS  | - 1 -                             | - / -                             | - 1 -                             | - / 1.755                         | - 1 -                             | - /1.755                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| ICS-Labor   | - 1 -                             | - 1 -                             | - 1 -                             | - /6.114                          | - 1 -                             | - /6.114                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| PMA - Other Gov't Costs                           | - 1 -                             | - 1 -                             | - 1 -                             | - / 0.174                         | - 1 -                             | - / 0.174                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| PMA - Contractor Services                         | - 1 -                             | - 1 -                             | - 1 -                             | - / 0.842                         | - 1 -                             | - / 0.842                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Support                                 | - / -                             | - / -                             | - / -                             | - /10.059                         | - / -                             | - /10.059                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Installation                                      |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Modification Item 1 of 1: UAS CSUAS1              | - 1 -                             | - 1 -                             | 0 / 10.575                        | 19 / 35.891                       | - 1 -                             | 19 / 35.891                       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Installation                            | - / -                             | - / -                             | - /10.575                         | 19 / 35.891                       | - / -                             | 19 / 35.891                       | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Total   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Total Cost (Procurement + Support + Installation) | -                                 | 0.000                             | 70.500                            | 136.000                           | 0.000                             | 136.000                           | =                                 | -                                 | -                                 | -                                 | -                                 | -                                |

Exhibit P-3a, Individual Modification: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 3080F / 03 / 4 834130 / Air Force Physical Security System 2 / Counter small - UAS ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code: Modification Item 1 of 1: UAS CSUAS1 Manufacturer Information Manufacturer Name: Commercial Off The Shelf Manufacturer Location: Various Administrative Leadtime (in Months): 0 Production Leadtime (in Months): 8 **Dates** FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022

Dec 2017

Aug 2018

Jun 2017

Feb 2018

#### Installation Information

**Contract Dates** 

**Delivery Dates** 

Method of Implementation: Contract Field Team

| •                 |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|                   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                             |
| Installation Cost | Qty (Each) I<br>Total Cost (\$ M) |
| Prior Years       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2016           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2017           | - 1 -                             | - 1 -                             | 0 / 10.575                        | 3 / 0.000                         | - 1 -                             | 3 / 0.000                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2018           | - 1 -                             | - 1 -                             | - 1 -                             | 16 / 35.891                       | - 1 -                             | 16 / 35.891                       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2019           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2020           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2021           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2022           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| To Complete       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| Total             | - 1 -                             | - 1 -                             | 0 / 10.575                        | 19 / 35.891                       | - 1 -                             | 19 / 35.891                       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |

#### Installation Schedule

|     | PYS Q1 Q2 Q3 Q |    |    |    |    | FY 2 | 2017 |    |    | FY 2 | 2018 |    |    | FY 2 | 2019 |    |    | FY 2 | 2020 |    |    | FY 2 | 2021 |    |    | FY 2 | 2022 |    |    |    |     |
|-----|----------------|----|----|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|----|-----|
|     | PYS            | Q1 | Q2 | Q3 | Q4 | Q1   | Q2   | Q3 | Q4 | Q1   | Q2   | Q3 | Q4 | Q1   | Q2   | Q3 | Q4 | Q1   | Q2   | Q3 | Q4 | Q1   | Q2   | Q3 | Q4 | Q1   | Q2   | Q3 | Q4 | тс | Tot |
| In  | 0              | -  | -  | -  | -  | -    | -    | -  | -  | -    | 3    | -  | 16 | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | 0  | 19  |
| Out | 0              | -  | -  | -  | -  | -    | -    | -  | -  | -    | 3    | -  | 16 | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | 0  | 19  |

| Exhibit P-3a, Individual Modification: FY 2018 Air Force              |  | Date: May 2017                              |
|---|--|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 | P-1 Line Item Number / Title:<br>834130 / Air Force Physical Security System | Modification Number / Title:<br>3 / IBDSS-1 |

| ID Code (A=Service Ready, B=Not Service Ready) | :            |                  |                    |                  |                  | MDAP/MA        | S Code:         |                |         |         |          |       |
|--|--------------|------------------|--------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|-------|
|  | Prior        |                  |                    | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |       |
| Resource Summary                               | Years        | FY 2016          | FY 2017            | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total |
| Procurement Quantity (Units in Each)           | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 0.000            | 65.869             | 16.029           | 0.000            | 16.029         | -               | -              | -       | -       | -        | -     |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Net Procurement (P-1) (\$ in Millions)         | -            | 0.000            | 65.869             | 16.029           | 0.000            | 16.029         | -               | -              | -       | -       | -        | -     |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Total Obligation Authority (\$ in Millions)    | -            | 0.000            | 65.869             | 16.029           | 0.000            | 16.029         | -               | -              | -       | -       | -        | -     |
| (The following                                 | Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) | •       |         |          |       |
| Initial Spares (\$ in Millions)                | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                  | -                | -                | -              | -               | -              | -       | -       | -        | -     |

## **Description:**

INTEGRATED BASE DEFENSE SECURITY SYSTEM (IBDSS-1): Reduces the risk to AF personnel; nuclear (PL-1N), and non-nuclear (PL 1-4) assets (weapon systems, aircraft, command & control systems, etc.) and facilities (hangars, SCIFs, etc.) at AF and ANG installations globally. DoD downsizing, reductions in forward basing, and aircraft technology advances evolved AF weapons systems into increasingly valuable national power projection capabilities. However, the security afforded most AF aircraft, weapon systems, other critical resources, and associated personnel and facilities in terms of equipment or manpower has not kept pace with the changing world environment, state-of-the-art technology and potential threats. The emergence of Remotely Piloted Aircraft (RPA) has led to additional command, control and communications nodes that require commensurate protection level security efforts to enable effective Air Force power projection. Force Protection BPSS projects support long-term physical security requirements which allow installation commanders and security forces to adapt to, and counter, enduring and emergent threats to high priority assets in accordance with home station and the Aerospace Expeditionary Force concept. This continuing effort was previously named Base Physical Security Systems and is not a New Start.

INTEGRATED BASE DEFENSE SECURITY SYSTEM (IBDSS-1): FY18 Funding is provided for procurement, design & engineering, modeling & simulation, infrastructure and allied support, installation, integration, training, acceptance testing, Interim Contractor Support (ICS) and interim spares for Base Physical Security Systems (BPSS) Intrusion Detection Systems (IDS). The funding also procures, installs and sustains a variety of electronic security alarms, sensors, and related systems to detect and provide early warning of potential threats against Air Force Protection Level (PL) 1,2,3, and 4 mission critical assets. Funding also supports the Nuclear (PL-1N) Weapon Storage Areas (WSAs) located throughout the CONUS and vault storage areas at main operating bases in Europe to meet long term physical security requirements in the face of enduring and emerging threats. This also includes upgrading existing system to ensure required capability for vault storage areas and associated intrusion detection, access control and assessment systems requirements, In Accordance With (IAW) USAF, EUCOM and NATO/SHAPE requirements. The funds also provide for upgrades, refurbishment, replacement or installation of new fences (required for sensor platforms) and/or lighting systems (to support the surveillance/assessment functions). Due to world-wide operational mission events, quantities are subject to change.

We are currently restructuring IBDSS into discrete block upgrades.

Milestone/Development Status

For Force Protection Commercial Off The Shelf (FP COTS) market research, evaluation and testing. The FP COTS testing applies to all available technologies (delay, denial, detection, assessment, communication display, access control and power) which are considered effective for AF physical security use. This program supports the maintenance and test support at Site C 3 and the Cold Weather Test Site (CWTS), as annotated in DoD Directive 3200.11, listing the 46th Test Wing (TW) as a Major Range and Test facility, conducting developmental and operational testing as the primary mission.

Continuing COTS and Modified COTS for system equipment as it becomes obsolete.

UNCLASSIFIED
Page 16 of 21

Exhibit P-3a, Individual Modification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:
834130 / Air Force Physical Security System

Date: May 2017

Modification Number / Title:
3 / IBDSS-1

| 3080F / 03 / 4                                    |                                   |                                   | 834130 <i>I A</i>                 | Air Force P                       | hysical Se                        | curity Syste                      | em                                |                                   | 3 / IBDSS                         | -1                                |                                   |                                  |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| ID Code (A=Service Ready, B=Not Service Ready):   |                                   |                                   |                                   |                                   | MD                                | AP/MAIS Co                        | ode:                              |                                   |                                   |                                   |                                   |                                  |
| Models of Systems Affected: Bases                 |                                   | Modif                             | ication Typ                       | <b>e:</b> Capabil                 | ity Improve                       | ement                             | Re                                | lated RDT                         | <b>&amp;E PEs</b> : 0             | 603287F, (                        | 0604287F                          |                                  |
|   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                            |
| Financial Plan                                    | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M |
| Procurement                                       |                                   |                                   | ·                                 |                                   |                                   |                                   |                                   |                                   | ·                                 |                                   |                                   |                                  |
| Modification Item 1 of 1: IBDSS-1                 |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| B Kits  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Recurring   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   | •                                |
| IBDSS-1:EQUIPMENT Group B (Active)                | - 1 -                             | - 1 -                             | 9 / 14.380                        | 1 / 3.060                         | - 1 -                             | 1 / 3.060                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Recurring                               | - / -                             | - / -                             | - /14.380                         | - /3.060                          | - / -                             | - /3.060                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: IBDSS-1                                 | - / -                             | - / -                             | - /14.380                         | - /3.060                          | - / -                             | - /3.060                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Subtotal: Procurement, All Modification Items     | - / -                             | - / -                             | - /14.380                         | - /3.060                          | - / -                             | - /3.060                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Support (All Modification Items)                  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| A&AS  | - 1 -                             | - 1 -                             | - /2.298                          | - / 1.957                         | - 1 -                             | - / 1.957                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| PMA - Contractor Services                         | - 1 -                             | - 1 -                             | - /3.331                          | - /3.415                          | - 1 -                             | - /3.415                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| PMA - Other Gov't Costs                           | - 1 -                             | - 1 -                             | - /0.392                          | - / 0.392                         | - 1 -                             | - / 0.392                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| ICS-Labor   | - 1 -                             | - 1 -                             | - /2.328                          | - 12.733                          | - 1 -                             | - 12.733                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Support                                 | - / -                             | - / -                             | - /8.349                          | - /8.497                          | - / -                             | - /8.497                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Installation                                      |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Modification Item 1 of 1: IBDSS-1                 | - 1 -                             | - 1 -                             | 9 / 43.140                        | 1 / 4.472                         | - 1 -                             | 1 / 4.472                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Subtotal: Installation                            | - / -                             | - / -                             | 9 / 43.140                        | 1 / 4.472                         | - / -                             | 1 / 4.472                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                            |
| Total   | •                                 |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                  |
| Total Cost (Procurement + Support + Installation) | -                                 | 0.000                             | 65.869                            | 16.029                            | 0.000                             | 16.029                            | -                                 | -                                 | _                                 | -                                 | _                                 | _                                |

**Date:** May 2017 Exhibit P-3a, Individual Modification: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 3080F / 03 / 4 834130 / Air Force Physical Security System 3 / IBDSS-1 ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code:

Modification Item 1 of 1: IBDSS-1

#### Manufacturer Information

| Manufacturer Name: Com     | mercial Off The Shelf |         |         | Manufacturer Location: Va | arioius    |         |         |
|----------------------------|-----------------------|---------|---------|---------------------------|------------|---------|---------|
| Administrative Leadtime (i | n Months): 3          |         |         | Production Leadtime (in M | lonths): 8 |         |         |
| Dotos                      | EV 2046               | EV 2047 | EV 2040 | EV 2040                   | EV 2020    | EV 2024 | EV 2022 |

| Dates          | FY 2016 | FY 2017  | FY 2018  | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|----------------|---------|----------|----------|---------|---------|---------|---------|
| Contract Dates |         | Jan 2017 | Jan 2018 |         |         |         |         |
| Delivery Dates |         | Sep 2017 | Sep 2018 |         |         |         |         |

#### Installation Information

Method of Implementation: Contract Field Team

|                   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                             |
|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Installation Cost | Qty (Each) I<br>Total Cost (\$ M) |
| Prior Years       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2016           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2017           | - 1 -                             | - 1 -                             | 9 / 43.140                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2018           | - 1 -                             | - 1 -                             | - 1 -                             | 1 / 4.472                         | - 1 -                             | 1 / 4.472                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2019           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2020           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2021           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2022           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| To Complete       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| Total             | - 1 -                             | - 1 -                             | 9 / 43.140                        | 1 / 4.472                         | - 1 -                             | 1 / 4.472                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |

#### Installation Schedule

|     |     |    | FY 2 | 2016 |    |    | FY 2 | 2017 |    |    | FY 2 | 2018 |    |    | FY 2 | 019 |    |    | FY 2 | 2020 |    |    | FY 2 | 2021 | -  |    | FY 2 | 2022 |    |    |     |
|-----|-----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|-----|----|----|------|------|----|----|------|------|----|----|------|------|----|----|-----|
|     | PYS | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3  | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3   | Q4 | тс | Tot |
| In  | 0   | -  | -    | -    | -  | -  | 9    | -    | -  | -  | 1    | -    | -  | -  | 8    | -   | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | 0  | 18  |
| Out | 0   | -  | -    | -    | -  | -  | 9    | -    | -  | -  | 1    | -    | -  | -  | 8    | -   | -  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -    | -  | 0  | 18  |

**Date:** May 2017 Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Items Title: 3080F / 03 / 4 834130 / Air Force Physical Security System Antiterrorism

|   |          |                       |           |               |                         |           | -             |                         |           |               |                         | , -,      |                      |                         |           |               |                         |           |               |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba            | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 To       | tal                     |
| Item Number /<br>Title [DODIC]                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                                     |          |                       |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |
| Tactical and<br>Expeditionary Security<br>Systems | A        |                       | -         | -             | -                       | -         | -             | 9.100                   | -         | -             | 7.891                   | -         | -                    | 8.147                   | -         | -             | 0.000                   | -         | -             | 8.147                   |
| Subtotal: Uncategorized                           |          |                       | -         | -             | -                       | -         | -             | 9.100                   | -         | -             | 7.891                   | -         | -                    | 8.147                   | -         | -             | 0.000                   | -         | -             | 8.147                   |
| Total   |          |                       | -         |               | -                       | -         | -             | 9.100                   | -         | -             | 7.891                   | -         | -                    | 8.147                   | -         | -             | 0.000                   | -         | -             | 8.147                   |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ems: FY 2018 Air Force                      | Date: May 2017                        |
|---|---|---------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | P-1 Line Item Number / Title:               | Aggregated Items Title:               |
| 3080F / 03 / 4  | 834130 / Air Force Physical Security System | Command Support - Tactical Air Forces |

|                                      |                                  |                       |           |               |                         |           |                      |                         |           | ,                    |                         | , ,       |                      |                         |           |               |                         |           |                   |                         |
|--------------------------------------|----------------------------------|-----------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|-------------------|-------------------------|
|                                      |                                  |                       | F         | Prior Year    | s                       |           | FY 2016              |                         |           | FY 2017              |                         | FY        | ′ 2018 Bas           | se                      | FΥ        | / 2018 OC     | 0                       | FY        | 2018 Tot          | al                      |
| Item Number /<br>Title [DODIC]       | ID<br>CD                         | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) |
| Command Support Taction              | nand Support Tactical Air Forces |                       |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |           |                   |                         |
| New Item                             | Α                                |                       | -         | -             | -                       | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | 3.000     | 1             | 3.000                   | 3.000     | 1                 | 3.000                   |
| Subtotal: Command Supp<br>Air Forces | port T                           | actical               | -         | -             | -                       | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 3.000                   | -         | -                 | 3.000                   |
| Total                                |                                  |                       | -         | -             | -                       | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 3.000                   | -         | -                 | 3.000                   |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force                       | Date: May 2017                 |
|---|---|--------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | P-1 Line Item Number / Title:               | Aggregated Items Title:        |
| 3080F / 03 / 4  | 834130 / Air Force Physical Security System | Air Base Security Forces (ANG) |

|                                     |          |                       |           |               |                         |           | 1             |                         |           | o, o          |                         | , 0,01    | •                 |                         | ' "       |               |                         |           | , ( )         |                         |
|-------------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|-------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                     |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba         | se                      | FY        | / 2018 OC     | 0                       | FY        | / 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]      | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Air Base Security Forces            | (Gua     | rd)                   |           |               |                         |           |               |                         |           |               |                         |           |                   |                         |           |               |                         |           |               |                         |
| Air Base Security<br>Forces         | A        |                       | -         | -             | -                       | -         | -             | 0.000                   | 59.100    | 1             | 59.100                  | -         | -                 | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Subtotal: Air Base Secur<br>(Guard) | ity Fo   | rces                  | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 59.100                  | -         | -                 | 0.000                   | -         | -             | 0.000                   |           | -             | 0.000                   |
| Total                               |          |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 59.100                  | -         | -                 | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

FY 2017 Request for Additional Appropriations": \$59.1 million PE52625F is required for Battlefield Airman includes Security Forces, Guardian Angels, Special Tactics, and Terminal Air Controllers.

The items required include communication equipment, situational awareness equipment, personal protective equipment, night vision devices, weapons and weapons accessories, training devices, and explosive detection equipment.



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834190 / Combat Training Ranges

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207429F

Other Related Program Elements: 0207429F, 0604735F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior           |                  |                   | FY 2018          | FY 2018          | FY 2018        |                        |                        |                        |                        | То       |                        |
|--|-----------------|------------------|-------------------|------------------|------------------|----------------|------------------------|------------------------|------------------------|------------------------|----------|------------------------|
| Resource Summary                               | Years           | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019                | FY 2020                | FY 2021                | FY 2022                | Complete | Total                  |
| Procurement Quantity (Units in Each)           | -               | -                | -                 | -                | -                | -              | -                      | -                      | -                      | -                      | -        | -                      |
| Gross/Weapon System Cost (\$ in Millions)      | 0.000           | 28.106           | 34.850            | 115.198          | 0.000            | 115.198        | 152.630 <sup>(a)</sup> | 244.714 <sup>(b)</sup> | 201.495 <sup>(c)</sup> | 215.380 <sup>(d)</sup> | -        | 992.373 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -               | -                | -                 | -                | -                | -              | -                      | -                      | -                      | -                      | -        | -                      |
| Net Procurement (P-1) (\$ in Millions)         | 0.000           | 28.106           | 34.850            | 115.198          | 0.000            | 115.198        | 152.630                | 244.714                | 201.495                | 215.380                | -        | 992.373                |
| Plus CY Advance Procurement (\$ in Millions)   | -               | -                | -                 | -                | -                | -              | -                      | -                      | -                      | -                      | -        | -                      |
| Total Obligation Authority (\$ in Millions)    | 0.000           | 28.106           | 34.850            | 115.198          | 0.000            | 115.198        | 152.630                | 244.714                | 201.495                | 215.380                | -        | 992.373                |
| (The following                                 | g Resource Sumi | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente        | d elsewhere.)          |                        |                        | '        |                        |
| Initial Spares (\$ in Millions)                | -               | -                | -                 | -                | -                | -              | -                      | -                      | -                      | -                      | -        | -                      |
| Flyaway Unit Cost (\$ in Millions)             | -               | -                | -                 | -                | -                | -              | -                      | -                      | -                      | -                      | -        | -                      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -               | -                | -                 | -                | -                | -              | -                      | -                      | -                      | -                      | -        | -                      |

## **Description:**

The Combat Training Range program procures electronic telecommunication and instrumentation equipment and threat systems for training ranges worldwide to satisfy EW training capability requirements. It also procures range scoring systems and replacement equipment for electronics no longer logistically supportable. This P-1 line also procures Target Control System (TCS) ground subsystems for target drones.

#### PE 0207429F COMBAT TRAINING RANGE EQUIPMENT

JOINT THREAT EMITTER (JTE): The Joint Threat Emitter is designed to train aircrews to survive in a combat environment against Surface-to-Air Missile (SAM) and Anti-Aircraft Artillery (AAA) threats. The JTE simulates a range of threat signals, in multiple emitter kits, which interact with the aircraft Radar Warning Receiver and Electronic Countermeasure system to provide realistic Electronic Warfare training environments for pilots and crew members. The JTE is intended to reduce range manpower and resource requirements by replacing legacy systems as they face increasing supportability issues. The JTE leverages Commercial-Off-The Shelf (COTS) where possible to provide digital signal generation and feedback across its range of threats. The JTE system uses a command-and-control unit (C2U) to operate a Threat Emitter Unit (TEU) producing a realistic threat environment for 4th and 5th Generation aircraft. Funding will also be used to purchase services applicable to the acquisition, site activation and implementation of the ground system including range site surveys, installation and training. The program also procures modifications for obsolete components for the fielded JTE fleet to extend their serviceable life. Funds may be used to address emerging and short-notice Diminishing Manufacturing and Material Shortage (DMSMS) issues.

RANGE EQUIPMENT: This effort delivers range infrastructure and equipment. One such effort is the Joint Advanced Weapon Scoring System (JAWSS) program, which consists of Navy-developed scoring systems that upgrade the weapon (bombing and gunnery) and laser spot scoring on ranges. The equipment provide multiple new capabilities, to include scoring of day or night operations, production of a data stream with immediate displays, and results transmission to the pilot providing immediate feedback previously unavailable to aircrew. Other Electronic Warfare (EW) threat subsystems such as noise and spoofing jammers as well as radar and detection systems, data link connectivity and target shells will be procured in order to monitor and control an extended, realistic target environment for simulated ordnance delivery and aircrew training for airborne laser designators.

RANGE COMMUNICATIONS: The Range Communication (RIMCOM) program provides communication systems to connect various simulated surface-to-air (SAM) threat systems on Air Force ranges to simulate an integrated air defense system (IADS) and to provide blue force command and control for range operations. Infrastructure modernization includes replacing obsolete equipment, establishing a common infrastructure to support a future Live Mission Operations Center (LMOC) capability enabling improved mission debriefs and Live, Virtual, Constructive (LVC) aircrew training, and standardization of all training range communications systems to support LVC training missions. This program focuses on procurement of range communication infrastructure equipment, including fiber optic cabling, microwave, UHF, and VHF radios and antennas, data links and repeater stations, power subsystems, control systems, and cryptological equipment for unclassified and secure communications for all Combat Training Ranges, in addition

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P-1 Line #30

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834190 / Combat Training Ranges

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207429F

Other Related Program Elements: 0207429F, 0604735F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

to studies, analysis, and integration efforts for range command and control, LVC training, and enhanced debrief capabilities. Funds may be used to address emerging and short-notice Diminishing Manufacturing and Material Shortage (DMSMS) issues.

LEGACY SYSTEMS: This program procures modifications for multiple obsolete legacy range threat systems (RTS) to extend their serviceable life. Legacy RTS including Miniature Multiple Threat Emitter System (Mini-MUTES); Multiple Threat Emitter System (MUTES); Modular Threat Emitter (MTE); Tactical Range Threat Generator (TRTG); Unmanned Threat Emitter (UMTE); and Band Simulator (Band Sim); and their associated mission support equipment/software. Funds may be used to address emerging and short-notice Diminishing Manufacturing and Material Shortage (DMSMS) issues.

COMMON ELECTRONIC ATTACK RECEIVER: This program procures a common electronic attack receiver (CEAR) to replace the obsolete electronic attack receivers (EAR) on Legacy Threat Systems such as the Unmanned Threat Emitter (UMTE), the Joint Threat Emitter (JTE), and the Miniature-Multiple Unmanned Threat Emitter System (Mini-MUTES). The CEAR provides real-time and recorded Electronic Warfare feedback to Combat Air Force (CAF) aircrews, improving their survivability in anti-access/area denial combat environments.

#### PE 0305116F AERIAL TARGETS

TARGET CONTROL SYSTEMS (TCS): Data Link System Replacement (DLSr): The current Data Link system units in use at Tyndall AFB contain many obsolete parts and are no longer repairable due to lack of replacement parts. Repairs are made today through cannibalization of other units currently in use or intended as backup units, and the population of these units is becoming depleted with less than 3 "full up spares" left. The DLSr will be compatible with legacy targets operation on the Tyndall range. The DLSr will integrate into current Gulf Range Drone Control System (GRDCS) system. The DLSr will be able to be remotely configured to function as a relay, master, or slave to better enable the dynamic weapon system evaluation program (WSEP) environment and incorporate advancements in targets such as the QF-16.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 3       | 1       | 8               | -              | 8                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 25.672  | 34.850  | 105.654         | -              | 105.654          | 11.826  | -       | -       | -       |
| AFNG                   | Quantity                   | -       | -       | 2               | -              | 2                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 2.434   | -       | 9.544           | -              | 9.544            | -       | -       | -       | -       |
| AFR                    | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | -       | 0.000           | -              | 0.000            | -       | -       | -       | -       |
| Total:                 | Quantity                   | 3       | 1       | 10              | -              | 10               | -       | -       | -       | -       |
| Secondary Distribution | Total Obligation Authority | 28.106  | 34.850  | 115.198         | -              | 115.198          | 11.826  | -       | -       | -       |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834190 / Combat Training Ranges

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207429F

Other Related Program Elements: 0207429F, 0604735F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule               |                       |  |  | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO | FY 2018 Total |
|-----------------|---------------------------------|-----------------------|--|--|--|--|--|--|-------------|---------------|
| Exhibit<br>Type | Title*                          | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |             |               |
| P-5             | JTE                             |                       |  |  |  |  | 1 / 3.615                                | 10 / 54.014                              | - / -       | 10 / 54.014   |
| P-5             | Range Equipment                 |                       | Α  |  | - / -                                    | - / 0.000                                | - /1.371                                 | - /5.370                                 | - / -       | - /5.370      |
| P-5             | Range Communications            |                       |  |  |  | - / -                                    | - / 25.964                               | - / 52.330                               | - / -       | - / 52.330    |
| P-40a           | Combat Training Range Equipment |                       | - / 0.000                                | - / 10.651                               | - /3.900                                 | - / 3.484                                | - / 0.000                                | - / 3.484                                |             |               |
| P-40            | Total Gross/Weapon System Cost  |                       |  |  | - / 0.000                                | - / 28.106                               | - / 34.850                               | - / 115.198                              | - / 0.000   | - / 115.198   |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

JOINT THREAT EMITTER (JTE): FY18 funding requested is to procure additional JTE threat emitter units and fixed command and control units and the associated equipment.

RANGE COMMUNICATIONS (RIMCOM): FY18 funding is requested for range communications equipment to provide an integrated air defense system (IADS) capability on Air Force ranges. FY18 expenditures will focus on continued investment in enabling equipment, studies and analyses to support integration efforts for a future Live Mission Operations Center (LMOC) capability, as well as procurement of equipment for all combat training ranges.

RANGE EQUIPMENT: FY18 funding requested to replace equipment that is no longer logistically supportable.

COMMON ELECTRONIC ATTACK RECEIVER: FY18 funding requested to procure additional CEARs to modify UMTEs and Mini-MUTES emitter systems to replace the obsolete electronic attack receivers.

PE0305116F AERIAL TARGETS

TARGET CONTROL SYSTEMS (TCS): No FY18 funding requested.

Efforts with funding starting in FY 2019 through FY 2022 are summarized on the P-40. Not all details of this funding are included in this P-40 exhibit set. A summary of the excepted details is as follows:

(a) FY 2019 Cost Delta: 152.630 million

(b) FY 2020 Cost Delta: 244.714 million

(c) FY 2021 Cost Delta: 201.495 million

(d) FY 2022 Cost Delta: 215.380 million

(e) FY Total Cost Delta: 992.373 million

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|   |                   |                  |               |                 |              |                 | U.           | VCLA3                       | )II IEE        | <b>,</b>     |               |                 |           |                 |                |           |                 |               |
|---|-------------------|------------------|---------------|-----------------|--------------|-----------------|--------------|-----------------------------|----------------|--------------|---------------|-----------------|-----------|-----------------|----------------|-----------|-----------------|---------------|
| Exhibit P-5, Cost                                 | Analysis          | : FY 20          | 18 Air F      | orce            |              |                 |              |                             |                |              |               |                 |           | ate: N          | May 2017       |           |                 |               |
| Appropriation / B<br>3080F / 03 / 4               | Budget Ac         | tivity /         | Budget        | Sub Acti        | vity:        |                 |              | <b>Number</b><br>nbat Train |                |              |               |                 |           | tem Nu<br>/ JTE | umber / 1      | itle [DO  | DIC]:           |               |
| ID Code (A=Service Read                           | dy, B=Not Service | ce Ready): I     | <br>В         |                 |              |                 |              |                             | М              | DAP/MAIS     | Code:         |                 |           |                 |                |           |                 |               |
|   | Resource          |                  |               |                 |              | Prior Yea       | ars          | FY 20                       |                |              | 2017          | FY 2            | 018 Bas   | e F             | Y 2018 C       | oco       | FY 2018         | Total         |
| Procurement Quantity (Uni                         |                   | -                | w. y          |                 | -            |                 | _            |                             | 3              |              | 1             | · · -           | 0.0 200   | 10              |                | _         |                 | 1             |
| Gross/Weapon System Co                            |                   | e)               |               |                 |              |                 | -            |                             | 17.455         |              | 3.615         |                 | 54        | 014             |                | -         |                 | 54.01         |
| Less PY Advance Procure                           | •                 |                  |               |                 |              |                 |              |                             | -              |              |               |                 | 01.       | -               |                | _         |                 | -             |
| Net Procurement (P-1) (\$ i                       |                   |                  |               |                 |              |                 | _            |                             | 17.455         |              | 3.615         |                 | 54.       | 014             |                | _         |                 | 54.01         |
| Plus CY Advance Procure                           |                   | ions)            |               |                 |              |                 | _            |                             | -              |              |               |                 | 01.       | -               |                | _         |                 |               |
| Total Obligation Authorit                         |                   |                  |               |                 |              |                 | -            |                             | 17.455         |              | 3.615         |                 | 54.       | 014             |                | -         |                 | 54.01         |
|   | -                 |                  | ummary rov    | vs are for info | rmational p  | urposes only    | . The corres | ponding budg                | et request     | s are docume | ented elsewhe | re.)            |           |                 |                | ļ.        |                 |               |
| Initial Spares (\$ in Millions)                   |                   |                  |               |                 |              |                 | -            | . 55                        | -              |              | _             |                 |           | -               |                | -         |                 | -             |
| Gross/Weapon System Ur                            | nit Cost (\$ in M | fillions)        |               |                 |              | - 5.818 3.615   |              |                             |                |              | 5.            | 401             |           | -               |                | 5.40      |                 |               |
| Note: Subtotals or Totals i                       | in this Exhibit   | P-5 may no       | ot be exact   | or sum exactly  | y due to rou | unding.         |              |                             |                |              |               |                 |           |                 |                |           |                 |               |
|   | Р                 | rior Years       | <br>S         |                 | FY 2016      |                 |              | FY 2017                     |                | FY           | 2018 Base     |                 | FY        | 2018 O          | СО             | F'        | Y 2018 Tota     | al            |
|   | Unit Cost         | Qty              | Total<br>Cost | Unit Cost       | Qty          | Total<br>Cost   | Unit Cost    | Qty                         | Total<br>Cost  | Unit Cost    | Qty           | Total<br>Cost   | Unit Cost | Qty             | Total<br>Cost  | Unit Cost | Qty             | Total<br>Cost |
| Cost Elements                                     | (\$ M)            | (Each)           | (\$ M)        | (\$ M)          | (Each)       | (\$ M)          | (\$ M)       | (Each)                      | (\$ M)         | (\$ M)       | (Each)        | (\$ M)          | (\$ M)    | (Each)          | (\$ M)         | (\$ M)    | (Each)          | (\$ M)        |
| Hardware - JTE Cost                               |                   |                  |               |                 |              |                 |              |                             |                |              |               |                 |           |                 |                |           |                 |               |
| Recurring Cost  Joint Threat Emitter              |                   |                  |               |                 |              |                 |              |                             |                |              |               |                 |           |                 |                |           |                 |               |
| (JTE) Units <sup>(†)</sup>                        | -                 | -                | -             | 6.997           | 2            | 13.994          | -            | -                           | -              | 7.689        | 6             | 46.134          | -         | -               | -              | 7.689     | 6               | 46.13         |
| JTE Command Control<br>Unit                       | -                 | -                | -             | 1.306           | 1            |                 | 1.490        | 1                           | 1.490          | 1.395        | 4             | 5.580           | -         | -               | -              | 1.395     | 4               | 5.58          |
| Subtotal: Recurring Cost                          | -                 | -                | -             | -               | -            | 15.300          | -            | -                           | 1.490          | -            | -             | 51.714          | -         | -               | -              | -         | -               | 51.71         |
| Subtotal: Hardware - JTE<br>Cost                  | -                 | -                | -             | -               | -            | 15.300          | -            | -                           | 1.490          | -            | -             | 51.714          | -         | -               | -              | -         | -               | 51.71         |
| Support - JTE Cost                                |                   |                  |               |                 |              |                 |              |                             |                |              |               |                 |           |                 |                |           |                 |               |
| A&AS (PMA)  | -                 | -                | -             | -               | -            | 0.750           | -            | -                           | 0.750          | -            | -             | 0.750           | -         | -               | -              | -         | -               | 0.75          |
| A&AS (DMS)  | -                 | -                | -             | -               | -            | 1.100           | -            | -                           | 1.065          | -            | -             | 1.087           | -         | -               | -              | -         | -               | 1.08          |
| PMA   | -                 | -                | -             | -               | -            | 0.100           | -            | -                           | 0.100          | -            | -             | 0.142           | -         | -               | -              | -         | -               | 0.14          |
| Support /TE Cook                                  | -                 | -                | -             | -               | -            | 0.205           | -            | -                           | 0.210          | -            | -             | 0.321           | -         | -               | -              | -         | -               | 0.32          |
| Subtotal: Support - JTE Cost  Gross/Weapon System | -                 | -                | -             | 5.818           | 3            | 2.155<br>17.455 | 3.615        | 1                           | 2.125<br>3.615 | 5.401        | 10            | 2.300<br>54.014 | -         | -               | -              | 5.401     | 10              | 2.30<br>54.01 |
| Cost  |                   |                  |               |                 |              |                 |              |                             |                |              |               |                 |           |                 |                |           |                 |               |
|   |                   |                  | etribution    | 1               |              | FY 2016         |              |                             |                | FY 2017      |               | FY 20<br>Base   |           |                 | FY 2018<br>OCO |           | FY 201<br>Total | 8             |
|   | Seco              | ondary Di        | Stribution    |                 | 3            |                 |              | 1                           |                |              | r e           |                 |           |                 |                |           |                 |               |
| AF  | Seco              | ondary Di<br>Qua |               |                 |              |                 |              |                             | 3              |              | 1             |                 | 8         |                 |                | -         |                 |               |
| AFNG  | Seco              | Qua              |               |                 |              |                 |              | 17.45                       |                |              | 3.615         |                 | 44.470    |                 |                | -         |                 | 44.47         |

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| Exhibit P-5, Cost Analysis: FY 2018 Air Force                         |  | <b>Date</b> : May 2017               |
|---|--|--------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 | P-1 Line Item Number / Title:<br>834190 / Combat Training Ranges | Item Number / Title [DODIC]: - / JTE |
| ID Code (A-Service Boody B-Net Service Boody) · B                     | MDAP/MAIS Code:  | 1                                    |

| ID Code (A=Service Ready, B=Not Se | ervice Ready):B            |         | MDAP/MAIS Code | MDAP/MAIS Code: |                |                  |  |  |  |  |  |
|------------------------------------|----------------------------|---------|----------------|-----------------|----------------|------------------|--|--|--|--|--|
| Se                                 | econdary Distribution      | FY 2016 | FY 2017        | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |  |  |  |  |  |
|                                    | Total Obligation Authority | -       | -              | 9.544           | =              | 9.544            |  |  |  |  |  |
| Total:                             | Quantity                   | 3       | 1              | 10              | -              | 10               |  |  |  |  |  |
| Secondary Distribution             | Total Obligation Authority | 17.455  | 3.615          | 54.014          | -              | 54.014           |  |  |  |  |  |

 $<sup>^{(\</sup>dagger)}$  indicates the presence of a P-5a

| Exhibit P-5a, Procurement History and Planning: FY 2018 A | hibit P-5a, Procurement History and Planning: FY 2018 Air Force |                              |  |  |  |  |  |  |  |  |
|---|---|------------------------------|--|--|--|--|--|--|--|--|
| Appropriation / Budget Activity / Budget Sub Activity:    | P-1 Line Item Number / Title:                                   | Item Number / Title [DODIC]: |  |  |  |  |  |  |  |  |
| 3080F / 03 / 4  | 834190 / Combat Training Ranges                                 | -/JTE                        |  |  |  |  |  |  |  |  |

| Cost Elements                    | 000 | FY   | Contractor and Location                           | Method/Type<br>or<br>Funding Vehicle | Location of PCO | Award<br>Date | Date<br>of First<br>Delivery | <b>Qty</b><br>(Each) | Unit Cost | Specs<br>Avail<br>Now? | Date<br>Revision<br>Available | RFP Issue<br>Date |
|----------------------------------|-----|------|---|--------------------------------------|-----------------|---------------|------------------------------|----------------------|-----------|------------------------|-------------------------------|-------------------|
| Joint Threat Emitter (JTE) Units |     | 2016 | Northrop Grumman Amherst<br>Systems / Buffalo, NY | C / FFP                              | AFLCMC Hill AFB | Dec 2016      | Apr 2018                     | 2                    | 6.997     | N                      | Oct 2016                      |                   |
| Joint Threat Emitter (JTE) Units |     | 2018 | Northrup Grumman Amherst<br>Systems / Buffalo, NY | C / FFP                              | AFLCMC Hill AFB | Dec 2017      | Apr 2019                     | 6                    | 7.689     | N                      | Oct 2016                      |                   |

| Exilibit i -5, Cost  | Analysis          | : FY 20                       | 18 Air F    | orce            |             |                           |               |                                |                                  |             |             |                                  |            | Date: N  | 1ay 2017                      |           |                                 |                              |
|--|-------------------|-------------------------------|-------------|-----------------|-------------|---------------------------|---------------|--------------------------------|----------------------------------|-------------|-------------|----------------------------------|------------|----------|-------------------------------|-----------|---------------------------------|------------------------------|
| Appropriation / B<br>3080F / 03 / 4  | Sudget Ad         | ctivity /                     | Budget      | Sub Act         | ivity:      |                           |               | <b>n Number</b><br>nbat Traini |                                  |             |             |                                  |            |          | <b>ımber / 1</b><br>ge Equipn |           | DIC]:                           |                              |
| ID Code (A=Service Read  | dy, B=Not Servi   | ce Ready) :                   | A           |                 |             |                           |               |                                | ME                               | OAP/MAIS    | S Code:     |                                  |            |          |                               |           |                                 |                              |
| F  | Resource          | Summ                          | arv         |                 |             | Prior Ye                  | ars           | FY 201                         | 6                                | FY          | 2017        | FY                               | 2018 Bas   | se F     | Y 2018 C                      | ОСО       | FY 2018                         | 3 Total                      |
| Procurement Quantity (Un   |                   |                               |             |                 |             |                           | -             |                                | _                                |             |             |                                  |            | -        |                               | -         |                                 | _                            |
| Gross/Weapon System Co   |                   | s)                            |             |                 |             |                           | -             |                                | 0.000                            |             | 1.3         | 71                               | 5          | 5.370    |                               | -         |                                 | 5.37                         |
| Less PY Advance Procure  |                   |                               |             |                 |             |                           | -             |                                | -                                |             |             |                                  |            | -        |                               | -         |                                 | -                            |
| Net Procurement (P-1) (\$  | in Millions)      |                               |             |                 |             |                           | -             |                                | 0.000                            |             | 1.3         | 71                               | 5          | 5.370    |                               | -         |                                 | 5.37                         |
| Plus CY Advance Procure  |                   | ions)                         |             |                 |             |                           | -             |                                | _                                |             |             | -                                |            | -        |                               | -         |                                 | _                            |
| Total Obligation Authori   | •                 |                               |             |                 |             |                           | -             |                                | 0.000                            |             | 1.3         | 71                               |            | 5.370    |                               | -         |                                 | 5.37                         |
| (T   | he following F    | Resource S                    | ummary row  | vs are for info | rmational p | urposes onl               | y. The corres | sponding budge                 | et request                       | s are docum | ented elsev | here.)                           |            |          |                               | `         |                                 |                              |
| Initial Spares (\$ in Millions)  |                   |                               |             |                 |             |                           | -             |                                | -                                |             |             |                                  |            | -        |                               | -         |                                 | -                            |
| Gross/Weapon System U  | nit Cost (\$ in N | fillions)                     |             |                 |             |                           |               |                                |                                  |             |             |                                  |            |          |                               | -         |                                 |                              |
|  |                   |                               |             |                 |             |                           |               |                                |                                  |             |             |                                  |            |          |                               |           |                                 |                              |
| Note: Subtotals or Totals i  | _                 |                               |             | or sum exactl   | -           |                           |               |                                |                                  |             |             |                                  |            |          |                               |           |                                 |                              |
|  | Р                 | rior Year                     | 1           |                 | FY 2016     | 1                         |               | FY 2017                        |                                  | FY          | Y 2018 Ba   | -                                | FY         | / 2018 O | _                             | F'        | Y 2018 Tot                      | 1                            |
| Cost Elements  | Prior Years       |                               |             |                 |             | Total<br>Qty Cost Unit Co |               | Qty                            | Total<br>Cost                    | Unit Cost   | Qty         | Total<br>Cost                    | Unit Cost  | Qty      | Total<br>Cost                 | Unit Cost | Qty                             | Total<br>Cost                |
|  |                   | (Lucii)                       | (4 141)     | (Ψ (Ψ)          | (Lacii)     | (\$ M)                    | (\$ M)        | (Each)                         | (\$ M)                           | (\$ M)      | (Each)      | (\$ M)                           | (\$ M)     | (Each)   | (\$ M)                        | (\$ M)    | (Each)                          | (\$ M)                       |
| Hardware - Range Equipmen  | L , , , , ,       | (Edon)                        | (0 111)     | (\$ 101)        | (Lacii)     | (\$ M)                    | (\$ M)        | (Each)                         | (\$ M)                           | (\$ M)      | (Each)      | (\$ M)                           | (\$ M)     |          | (\$ M)                        | (\$ M)    | (Each)                          | (\$ M)                       |
| Hardware - Range Equipmen Recurring Cost   | L , , , , ,       | (Eddin)                       | (\$ 111)    | (\$ W)          | (Lacii)     | (\$ M)                    | (\$ M)        | (Each)                         | (\$ M)                           | (\$ M)      | (Each)      | (\$ M)                           | (\$ M)     |          | (\$ M)                        | (\$ M)    | (Each)                          | (\$ M)                       |
| Recurring Cost  Range Equipment  | L , , , , ,       | -                             | -           | -               | (Laci)      | 0.000                     | -             | (Each)                         | 1.371                            | (\$ M)<br>- | (Each)      | 5.370                            | (\$ M)     |          | (\$ M)                        | (\$ M)    | (Each)                          | 5.37                         |
| Recurring Cost  Range Equipment  Subtotal: Recurring Cost  | t Cost            | · · · ·                       |             |                 | , ,         |                           | -             |                                |                                  |             |             |                                  |            | (Each)   |                               |           |                                 | 5.37                         |
| Recurring Cost  Range Equipment  | t Cost            | -                             | -           | -               | -           | 0.000                     | -             | -                              | 1.371                            | -           | -           | 5.370                            | -          | (Each)   | -                             | -         | -                               | 5.37<br>5.37                 |
| Recurring Cost Range Equipment Subtotal: Recurring Cost Subtotal: Hardware - Range   | t Cost            | -                             | -           | -               | -           | 0.000                     | -             |                                | 1.371<br>1.371                   | -           | -           | 5.370<br>5.370                   | -          | (Each)   | -                             | -         | -                               | 5.37<br>5.37<br><b>5.37</b>  |
| Recurring Cost  Range Equipment  Subtotal: Recurring Cost  Subtotal: Hardware - Range Equipment Cost  Gross/Weapon System      | t Cost            | -                             | -           | -               | -<br>-<br>- | 0.000<br>0.000<br>0.000   | -             |                                | 1.371<br>1.371<br>1.371          | -           | -           | 5.370<br>5.370<br>5.370          |            | (Each)   | -                             | -         | -                               | 5.37<br>5.37<br>5.37<br>5.37 |
| Recurring Cost  Range Equipment  Subtotal: Recurring Cost  Subtotal: Hardware - Range Equipment Cost  Gross/Weapon System      | t Cost            | ondary Di                     | -           | -               | -<br>-<br>- | 0.000<br>0.000<br>0.000   | -             |                                | 1.371<br>1.371<br>1.371          | -           | -           | 5.370<br>5.370<br>5.370<br>5.370 |            | (Each)   | -<br>-<br>-<br>-<br>FY 2018   | -         | -<br>-<br>-<br>-<br>-<br>FY 20° | 5.37<br>5.37<br>5.37<br>5.37 |
| Recurring Cost  Range Equipment  Subtotal: Recurring Cost  Subtotal: Hardware - Range Equipment Cost  Gross/Weapon System Cost | t Cost            | -<br>-<br>-<br>-<br>ondary Di | -<br>-<br>- | -               | -<br>-<br>- | 0.000<br>0.000<br>0.000   | -             |                                | 1.371<br>1.371<br>1.371<br>1.371 | -           | -           | 5.370<br>5.370<br>5.370<br>5.370 |            | (Each)   | -<br>-<br>-<br>-<br>FY 2018   | -         | -<br>-<br>-<br>-<br>-<br>FY 20° | 5.37<br>5.37<br>5.37<br>5.37 |
| Recurring Cost  Range Equipment  Subtotal: Recurring Cost  Subtotal: Hardware - Range Equipment Cost  Gross/Weapon System Cost | t Cost            | ondary Di Qua Tota            |             |                 | -<br>-<br>- | 0.000<br>0.000<br>0.000   | -             | 2016                           | 1.371<br>1.371<br>1.371<br>1.371 | -           | -           | 5.370<br>5.370<br>5.370<br>5.370 | 018<br>See | (Each)   | -<br>-<br>-<br>-<br>FY 2018   | -         | -<br>-<br>-<br>-<br>-<br>FY 20° | 5.37<br>5.37<br>5.37<br>5.37 |

LI 834190 - Combat Training Ranges Air Force

UNCLASSIFIED
Page 7 of 10

P-1 Line #30

Volume 1 - 241

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 4

P-1 Line Item Number / Title:
834190 / Combat Training Ranges

Item Number / Title [DODIC]:
- / Range Communications

| ID Code (A=Service Ready, B=Not Service Ready): A        |                             | N                       | MDAP/MAIS Code:             |              |             |               |  |  |  |  |  |  |
|--|-----------------------------|-------------------------|-----------------------------|--------------|-------------|---------------|--|--|--|--|--|--|
| Resource Summary   | Prior Years                 | FY 2016                 | FY 2017                     | FY 2018 Base | FY 2018 OCO | FY 2018 Total |  |  |  |  |  |  |
| Procurement Quantity (Units in Each)                     | -                           | -                       | -                           | -            | -           | -             |  |  |  |  |  |  |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | -                       | 25.964                      | 52.330       | -           | 52.330        |  |  |  |  |  |  |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                       | -                           | -            | -           | -             |  |  |  |  |  |  |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | -                       | 25.964                      | 52.330       | -           | 52.330        |  |  |  |  |  |  |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                       | -                           | -            | -           | -             |  |  |  |  |  |  |
| Total Obligation Authority (\$ in Millions)              | -                           | -                       | 25.964                      | 52.330       | -           | 52.330        |  |  |  |  |  |  |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reque | sts are documented elsewher | re.)         |             |               |  |  |  |  |  |  |
| Initial Spares (\$ in Millions)                          | -                           | -                       | -                           | -            | -           | -             |  |  |  |  |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | -                       | -                           | -            | -           | -             |  |  |  |  |  |  |

|  | P             | rior Years    | 3                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | e                       | FY        | ' 2018 OC     | 0                       | FY        | ' 2018 Tot    | .al                     |
|--|---------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements  | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - RIMCOM/Range                                | Equipment Cos | t             |                         |           |               |                         |           |               |                         |           | ·             |                         |           |               |                         | '         |               |                         |
| Recurring Cost   |               |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Radios   | -             | -             | -                       | -         | -             | -                       | 0.049     | 132           | 6.473                   | 0.033     | 61            | 2.013                   | -         | -             | -                       | 0.033     | 61            | 2.                      |
| Datalink   | -             | -             | -                       | -         | -             | -                       | 0.125     | 2             | 0.250                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| IADS Networks  | -             | -             | -                       | -         | -             | -                       | 1.000     | 4             | 4.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Fiber Optics   | -             | -             | -                       | -         | -             | -                       | 0.234     | 7             | 1.637                   | 1.200     | 1             | 1.200                   | -         | -             | -                       | 1.200     | 1             | 1.                      |
| Datalink/EW Jammers                                    | -             | -             | -                       | -         | -             | -                       | 1.400     | 5             | 7.000                   | 3.750     | 2             | 7.500                   | -         | -             | -                       | 3.750     | 2             | 7                       |
| Test Calibration<br>Equpment                           | -             | -             | -                       | -         | -             | -                       | 0.776     | 8             | 6.208                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Range/ Mission<br>Control                              | -             | -             | -                       | -         | -             | -                       | -         | -             | -                       | 2.690     | 10            | 26.900                  | -         | -             | -                       | 2.690     | 10            | 26                      |
| Radars   | -             | -             | -                       | -         | -             | -                       | -         | -             | -                       | 3.000     | 2             | 6.000                   | -         | -             | -                       | 3.000     | 2             | 6                       |
| Security Systems                                       | -             | -             | -                       | -         | -             | -                       | -         | -             | -                       | 6.000     | 1             | 6.000                   | -         | -             | -                       | 6.000     | 1             | 6                       |
| Subtotal: Recurring Cost                               | -             | -             | -                       | -         | -             | -                       | -         | -             | 25.568                  | -         | -             | 49.613                  | -         | -             | -                       | -         | -             | 49                      |
| Subtotal: Hardware -<br>RIMCOM/Range Equipment<br>Cost | -             | -             | -                       | -         | -             | -                       | -         | -             | 25.568                  | -         | -             | 49.613                  | -         | -             | -                       | -         | -             | 49                      |
| Support - RIMCOM/Range Ed                              | quipment Cost |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| A&AS   | -             | -             | -                       | -         | -             | -                       | -         | -             | 0.300                   | -         | -             | 2.590                   | -         | -             | -                       | -         | -             | 2                       |
| PMA  | -             | -             | -                       | -         | -             | -                       | -         | -             | 0.096                   | -         | -             | 0.127                   | -         | -             | -                       | -         | -             | 0                       |
| Subtotal: Support -<br>RIMCOM/Range Equipment<br>Cost  | -             | -             | -                       | -         | -             | -                       | -         | -             | 0.396                   | -         | -             | 2.717                   | -         | -             | -                       | -         | -             | 2                       |

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:

834190 / Combat Training Ranges

Item Number / Title [DODIC]:

- / Range Communications

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

| 140to: Cabtotalo di Totalo II | T UTIO EXTINOIS | . i o iliay ila | or bo oxaor c           | 1 oann oxaou | iy dao to tou | nang.                   |           |               |                         |           |               |                         |           |                  |                         |           |               |                         |
|-------------------------------|-----------------|-----------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|------------------|-------------------------|-----------|---------------|-------------------------|
|                               | Prior Years     |                 |                         |              | FY 2016       |                         |           | FY 2017       |                         |           | / 2018 Ba     | se                      | F         | <b>/ 2018 OC</b> | 0                       | F         | Y 2018 Tot    | al                      |
| Cost Elements                 | Unit Cost       | Qty<br>(Each)   | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)    | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Gross/Weapon System<br>Cost   | •               | -               | -                       | -            | -             | -                       | -         | -             | 25.964                  | -         | -             | 52.330                  | -         | -                | -                       | -         | -             | 52.330                  |

| Secondar               | FY 2016                    | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |        |
|------------------------|----------------------------|---------|-----------------|----------------|------------------|--------|
| AF                     | Quantity                   | -       | -               | -              | -                | -      |
|                        | Total Obligation Authority | -       | 25.964          | 52.330         | -                | 52.330 |
| Total:                 | Quantity                   | -       | -               | -              | =                | -      |
| Secondary Distribution | Total Obligation Authority | -       | 25.964          | 52.330         | -                | 52.330 |

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Modification Items Title:

3080F / 03 / 4 834190 / Combat Training Ranges

Combat Training Range Equipment

| 30001 7 00 7 4  |          |                       |             |               |                         |           |               | 70-11007                | Combat    | TTAITINI      | gitange                 | ,,,       |               |                         |           | onnoat i      | ranning                 | tange L   | quipinici     |                         |
|---|----------|-----------------------|-------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | Prior Years |               | FY 2016                 |           |               | FY 2017                 |           | FY 2018 Base  |                         | se        | FY 2018 OCO   |                         |           | FY 2018 Total |                         |           |               |                         |
|   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| CTR01 / Combat Training<br>Ranges Joint Threat<br>Emitter |          |                       | -           | -             | -                       | -         | -             | 3.651                   | -         | -             | -                       | -         | -             | 3.184                   | -         | -             | -                       | -         | -             | 3.184                   |
| Secondary Distribution                                    |          |                       |             |               |                         |           |               |                         |           |               | •                       |           |               | •                       |           | •             | ,                       |           |               |                         |
| AF  |          |                       |             | -             | -                       |           | -             | 1.217                   |           | -             | -                       |           | -             | 3.184                   |           | -             | -                       |           | -             | 3.184                   |
| AFNG  |          |                       |             | -             | -                       |           | -             | 2.434                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |
| CTR02 / CEAR UMTE<br>Mod                                  |          |                       | -           | -             | -                       | -         | -             | 7.000                   | -         | -             | 3.900                   | -         | -             | 0.150                   | -         | -             | -                       | -         | -             | 0.150                   |
| Secondary Distribution                                    |          |                       |             |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               | ,                       |           |               |                         |
| AF  |          |                       |             | -             | -                       |           | -             | 7.000                   |           | -             | 3.900                   |           | -             | 0.150                   |           | -             | -                       |           | -             | 0.150                   |
| CTR03 / CEAR Mini<br>MUTES Mod                            |          |                       | -           | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.150                   | -         | -             | -                       | -         | -             | 0.150                   |
| Secondary Distribution                                    |          |                       | ,           |               | •                       |           |               |                         |           |               | •                       |           |               | •                       |           | •             | ,                       |           |               | ,                       |
| AF  |          |                       |             | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 0.150                   |           | -             | -                       |           | -             | 0.150                   |
| AFNG  |          |                       |             | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 0.000                   |           | -             | -                       |           | -             | 0.000                   |
| AFR   |          |                       |             | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 0.000                   |           | -             | -                       |           | -             | 0.000                   |
| Total   |          |                       | -           | -             | 0.000                   | -         | -             | 10.651                  | -         | -             | 3.900                   | -         | -             | 3.484                   | -         | -             | 0.000                   | -         | -             | 3.484                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### **Modification Information:**

| Item Number / Title                                 | Models of Systems Affected | Modification Type      |  |  |  |  |
|---|----------------------------|------------------------|--|--|--|--|
| CTR01 / Combat Training Ranges Joint Threat Emitter | JointThreatEmitter         | Service Life Extension |  |  |  |  |
| CTR02 / CEAR UMTE Mod                               | CombatTrainingRange        | Capability Improvement |  |  |  |  |
| CTR03 / CEAR Mini MUTES Mod                         | CombatTrainingRange        | Capability Improvement |  |  |  |  |

**Date:** May 2017 Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 834210 / Minimum Essential Emergency Comm N

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0303131F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): B

| Line item widar/wais code. N/A                 |                | 1                |                   |                  | ı                |                |                 |               | 1       |         |          |         |
|--|----------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
|  | Prior          |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
| Resource Summary                               | Years          | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 5.232            | 198.925           | 0.292            | 0.000            | 0.292          | 172.062         | 25.024        | 25.477  | 25.937  | -        | 452.949 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -              | 5.232            | 198.925           | 0.292            | 0.000            | 0.292          | 172.062         | 25.024        | 25.477  | 25.937  | -        | 452.949 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -              | 5.232            | 198.925           | 0.292            | 0.000            | 0.292          | 172.062         | 25.024        | 25.477  | 25.937  | -        | 452.949 |
| (The following                                 | g Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) | •       |         |          |         |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |

## **Description:**

The Minimum Essential Emergency Communications Network (MEECN) portfolio modernizes the systems necessary to effectively provide assured communications connectivity between the President and the strategic deterrence forces in stressed environments.

Global Aircrew Strategic Network Terminal (Global ASNT) replaces inadequate, unsustainable strategic communications equipment at bomber, tanker and reconnaissance Wing Command Posts (WCPs). Nuclear Task Forces, Munitions Support Squadrons (MUNSS), and for Mobile Support Teams (MSTs). Global ASNT is a ground-based system that will provide survivable, secure communication paths to receive Emergency Action Messages (EAMs), Force Management messages, and Force Direction messages and disseminate them to bomber, tanker, and reconnaissance aircrews.

Global ASNT is being fielded in separate capability increments.

Global ASNT Inc 1 fields required Extremely High Frequency/Advanced Extremely High Frequency (EHF/AEHF) capabilities and replaces inadequate, unsustainable strategic mobile and fixed-site Single Channel Anti-jam Man-Portable (SCAMP) terminals and Secure, Mobile, Anti-Jam, Reliable, Tactical - Terminal (SMART-T) equipment. FY15 was the first year of Increment 1 procurement funding to support preproduction activities. The majority of pre-production support activities will be conducted in FY17 and FY18 in advance of the Milestone C decision in 2QFY19.

Global ASNT Inc 2 delivers an Aircrew Alerting System (AAS) consisting of personal and general alerting equipment, and High Frequency (HF) and Ultra High Frequency (UHF) capabilities. Increment 2 replaces inadequate, unsustainable Electromagnetic Pulse Hardened Dispersal Communication (EHDC) systems and Aircrew Alerting Communications Electromagnetic Pulse (AACE) systems.

Common Very Low Frequency (VLF)/Low Frequency (LF) Receiver (CVR) Increment 2 (CVR Inc 2) will deliver a survivable, beyond-line-of-sight path for Emergency Action Message (EAM) reception. CVR Inc 2 will produce a VLF/LF receiver to integrate into current and future airborne and ground based nodes and to improve system performance and reduce supportability costs through commonality. CVR Inc 2 procurement funding is planned to begin in FY20 and has moved from OPAF (3080) to APAF (3010) funding.

Funding for this exhibit is contained in PE 0303131F.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 834240 / Wide Area Surveillance (WAS)

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0604445F

Other Related Program Elements: 0604445F

Line Item MDAP/MAIS Code: 519

ID Code (A=Service Ready, B=Not Service Ready): B

|  | Prior   |                  |                    | FY 2018          | FY 2018         | FY 2018         |                 |                |         |         | То       |         |
|--|---|------------------|--------------------|------------------|-----------------|-----------------|-----------------|----------------|---------|---------|----------|---------|
| Resource Summary                               | Years   | FY 2016          | FY 2017            | Base             | oco             | Total           | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -   | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | 0.000   | 0.000            | 6.943              | 62.087           | 0.000           | 62.087          | 77.760          | 24.395         | 24.887  | 25.390  | -        | 221.462 |
| Less PY Advance Procurement (\$ in Millions)   | -   | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | nent (P-1) (\$ in Millions) 0.000 0.000 6.943 62.087 0. |                  | 0.000              | 62.087           | 77.760          | 24.395          | 24.887          | 25.390         | -       | 221.462 |          |         |
| Plus CY Advance Procurement (\$ in Millions)   | -   | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | 0.000   | 0.000            | 6.943              | 62.087           | 0.000           | 62.087          | 77.760          | 24.395         | 24.887  | 25.390  | -        | 221.462 |
| (The following                                 | Resource Sumi   | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget requests | s are documente | ed elsewhere.) |         |         | ·        |         |
| Initial Spares (\$ in Millions)                | -   | -                | -                  | -                | -               | -               | -               | 3.030          | 3.030   | 3.030   | -        | 9.090   |
| Flyaway Unit Cost (\$ in Millions)             |   |                  | -                  | -                | -               | -               | -               | -              |         |         |          |         |
| Gross/Weapon System Unit Cost (\$ in Millions) | -   | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |

## Description:

Wide Area Surveillance (WAS) consists of two advanced sensor systems, the Stateside Affordable Radar System (STARS) and Scorpion, incorporated into a single WAS System. Based on existing technological capabilities, WAS will detect/track low, slow and other asymmetrical threats in the airspace and meet the user needs of sensing stressing airborne targets in complex environments with affordable sensors. The sensor outputs will be incorporated into the Battle Control Systems-Fixed (BCS-F) air picture and utilized as the North American Aerospace Defense Command/ Northern Command (NORAD/ NORTHCOM) Command and Control (C2) air surveillance system of record.

The WAS strategy is a single step acquisition approach for full capability to develop, produce, and field highly capable and sustainable advanced sensors in the National Capitol Region. In FY18, the WAS program management office plans to award Production and Interim Contractor Support (ICS) Contracts for both STARS and Scorpion systems.

Funding for this exhibit contained in PE 0604445F, Wide Area Surveillance.

In FY17 Wide Area Surveillance was a new start.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834240 / Wide Area Surveillance (WAS)

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0604445F

Other Related Program Elements: 0604445F

Line Item MDAP/MAIS Code: 519

ID Code (A=Service Ready, B=Not Service Ready): B

|                 | Exhibits Schedule              |             |           |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|-----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD  | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | Wide Area Surveillance         |             | В         |                       | - / 0.000                                | - / 0.000                                | - / 6.943                                | - / 62.087                               | - / 0.000                                | - / 62.087                               |
| P-40            | Total Gross/Weapon System Cost |             | - / 0.000 | - / 0.000             | - / 6.943                                | - / 62.087                               | - / 0.000                                | - / 62.087                               |  |  |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

### Justification:

- FY18 funds will procure, produce and field operational Stateside Affordable Radar System (STARS) and Scorpion sensors, provide Interim Contractor Support (ICS) for fielded sensors, and procure additional system monitoring capabilities in accordance with North American Aerospace Defense Command (NORAD) and U.S. Northern Command (NORTHCOM) Homeland Defense Design.
- FY18 Program Management Administration (PMA) funds will provide management, engineering and technical support for the program office.
- Some key components of each Wide Area Surveillance (WAS) site have long lead time production items.
- This funding request supports potential Diminishing Manufacturing Sources (DMS) and obsolescence solutions, to include if optimal, life of type buys or bridge buys limited to the program of record quantity.

UNCLASSIFIED Page 2 of 3

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:

834240 / Wide Area Surveillance (WAS)

Date: May 2017

Item Number / Title [DODIC]:

- / Wide Area Surveillance

| ID Code (A=Service Ready, B=Not Service Ready) : B    |                              | M                        | DAP/MAIS Code:            |              |             |               |
|---|------------------------------|--------------------------|---------------------------|--------------|-------------|---------------|
| Resource Summary                                      | Prior Years                  | FY 2016                  | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                  | -                            | -                        | -                         | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)             | 0.000                        | 0.000                    | 6.943                     | 62.087       | 0.000       | 62.087        |
| Less PY Advance Procurement (\$ in Millions)          | -                            | -                        | -                         | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                | 0.000                        | 0.000                    | 6.943                     | 62.087       | 0.000       | 62.087        |
| Plus CY Advance Procurement (\$ in Millions)          | -                            | -                        | -                         | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)           | 0.000                        | 0.000                    | 6.943                     | 62.087       | 0.000       | 62.087        |
| (The following Resource Summary rows are for informat | ional purposes only. The cor | responding budget reques | s are documented elsewher | re.)         | 1           |               |
| Initial Spares (\$ in Millions)                       | -                            | -                        | -                         | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)        | _                            | -                        | _                         | _            | _           | _             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | P           | rior Years    | 3                       |           | FY 2016              |                         |           | FY 2017           |                         | F         | / 2018 Ba     | se                      | FΥ        | 2018 OC       | 0                       | F۱        | / 2018 Tot    | al                      |
|---|-------------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|-------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements                                       | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - Wide Area Survei                         | llance Cost |               |                         |           |                      |                         |           |                   |                         |           |               |                         |           |               |                         |           |               |                         |
| Recurring Cost                                      |             |               |                         |           |                      |                         |           |                   |                         |           |               |                         |           |               |                         |           |               |                         |
| Prime Contractor                                    | -           | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                 | 5.443                   | -         | -             | 56.267                  | -         | -             | -                       | -         | -             | 56.267                  |
| Subtotal: Recurring Cost                            | -           | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                 | 5.443                   | -         | -             | 56.267                  | -         | -             | -                       | -         | -             | 56.267                  |
| Subtotal: Hardware - Wide<br>Area Surveillance Cost | -           | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                 | 5.443                   | -         | -             | 56.267                  | -         | -             | -                       | -         | -             | 56.267                  |
| Support - Wide Area Surveilla                       | nce Cost    |               |                         |           |                      |                         |           |                   |                         |           |               |                         |           |               |                         |           |               |                         |
| DMS Support   | -           | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                 | -                       | -         | -             | 0.762                   | -         | -             | -                       | -         | -             | 0.762                   |
| PMA Contractor Services                             | -           | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                 | 1.500                   | -         | -             | 5.058                   | -         | -             | 0.000                   | -         | -             | 5.058                   |
| Subtotal: Support - Wide<br>Area Surveillance Cost  | -           | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                 | 1.500                   | -         | -             | 5.820                   | -         | -             | 0.000                   | -         | -             | 5.820                   |
| Gross/Weapon System<br>Cost                         | -           | -             | 0.000                   | -         |                      | 0.000                   | -         | -                 | 6.943                   | -         | -             | 62.087                  | -         | -             | 0.000                   | -         | -             | 62.087                  |

### Remarks:

The quantity of Wide Area Surveillance (WAS) systems is classified. Details provided upon request. Contact Major Willie Mims (SAF/AQID), 202-404-3331, for additional information.



**Date:** May 2017 Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834320 / C3 Countermeasures

Equip / BSA 4: Spcl Comm-Electronics Projects

Other Related Program Elements: N/A

P-1 Line #33

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior        |                  |                   | FY 2018           | FY 2018          | FY 2018        |                 |                |         |         | То       |         |
|--|--------------|------------------|-------------------|-------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|---------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base              | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                 | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 7.453            | 20.200            | 37.764            | 0.000            | 37.764         | 33.892          | 30.206         | 30.409  | 29.303  | -        | 189.227 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                 | -                | -              | -               | -              | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 7.453            | 20.200            | 37.764            | 0.000            | 37.764         | 33.892          | 30.206         | 30.409  | 29.303  | -        | 189.227 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                 | -                | -              | -               | -              | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 7.453            | 20.200            | 37.764            | 0.000            | 37.764         | 33.892          | 30.206         | 30.409  | 29.303  | -        | 189.227 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | ourposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) |         |         | <u>'</u> |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                 | -                | -              | -               | -              | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                 | -                | -              | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                 | -                | -              | -               | -              | -       | -       | -        | -       |

## **Description:**

National Technical Nuclear Forensics PE 0207573F - P-40A

Continues efforts previously funded by OSD for Prompt Diagnostics. Procures terrestrially-based sensors and communications for prompt output signal detection and nuclear debris collection analysis and evaluation to support nuclear event attribution. Funding also includes procurement of technical data and any required follow on system support.

Electronic Warfare Integrated Reprogramming (EWIR) PE 0207439F - P-40A

DISTRIBUTED MISSION OPERATIONS AND THREAT CHANGE ANALYSIS: Conducted by the 453rd Electronic Warfare Squadron (453 EWS), EWIR provides analytical capabilities and reachback support for DoD acquisition, planning and mission execution activities. These capabilities ensure electronic warfare (EW) systems and integrated combat platforms correctly recognize and respond to enemy, friendly and noncombatant systems operating within the electromagnetic environment. The effort includes funds used to procure specialized information technology systems used to identify electromagnetic spectrum emitter changes that impact combat defensive and electronic warfare systems and to conduct detailed analyses in support of operational mission planning, tactics, techniques and procedures (TTP) development, acquisition and test & evaluation. These analyses provide the means to understand the performance of their systems in hostile environments, directly impacting the survivability of combat-coded USAF aircraft and aircrews. Funding for this exhibit contained in PE0207439F.

AF Offensive Cyberspace Operations PE 0208087F - P-40A

Provides for the innovation, test, support and deployment of Cyberspace solutions in the form of material and non-material Cyberspace network attack tools and exploits for USAF Offensive Cyberspace Operations (OCO) to include but not limited to USAF OCO units, the Cyber Mission Forces, COCOMs, and other authorized agencies. Funding procures specialized hardware/software necessary for real time deployment, exploit identification, tool development, and testing in an environment simulating real-world operational infrastructures and enclaves. Funding also is used for the upgrade and modification of the USAF operated cyber test and training range, operated by the 346th Test Squadron under the 688th Cyber Wing.

Funding for this exhibit contained in PE 0208087F

Detailed information on AF Offensive Cyber Operations remains classified and will be provided on a need-to-know basis. For further information, please contact AF/A2. This program is reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

AF Defensive Cyberspace Operations PE 0208088F - P-40A

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LI 834320 - C3 Countermeasures Air Force Page 1 of 10

|   | UNCLA                                | SSIFIED                               |  |
|---|--------------------------------------|---------------------------------------|--|
| Exhibit P-40, Budget Line Item Justification: FY 2018   | Air Force                            |                                       | <b>Date</b> : May 2017   |
| Appropriation / Budget Activity / Budget Sub Activity 3080F: Other Procurement, Air Force / BA 03: Electronic Equip / BSA 4: Spcl Comm-Electronics Projects |                                      | <b>P-1 Line Item N</b> 834320 / C3 Co |  |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It       | ems: N/A                              | Other Related Program Elements: N/A  |
| Line Item MDAP/MAIS Code: N/A   |                                      |                                       |  |
| Defensive Cyber Operations provides focused, agile cyber defense for operations.  | rces to provide mission assurance t  | by maneuvering withir                 | n high-value, mission OEF networks and systems to assure unobstructed successful   |
| Intel Data Applications PE 0208288F - P-40A Includes several subprograms: CONSTANT WEB, SENSOR SHADON Tool Development.                                     | W, Technical Electronic Intelligence | (ELINT) Analytics/To                  | ol Development and Operational Reconnaissance (Ops Recce) Capability, Analytics  |
| *CONSTANT WEB is a database developed by the US Air Force's Interinstallations. It also provides limited criticality assessments of C3 elements.            |                                      | aissance Agency (AFIS                 | SRA) that contains information on both hostile and friendly C3 networks, units, and  |
| *SENSOR SHADOW is a Command and Control Warfare (C2W) and systems, and infrastructure to support holistic Information Operations                            |                                      |                                       | ional planners. Funding provides upgrades of critical computers, processing argeting that enables the shift from conventional to IW/C2W targeting. |
| *Technical Electronic Intelligence (TechELINT) Analytics/Tool Develop exploitation and dissemination of intercepted ELINT from US and allie                 |                                      | f new analytical softwa               | are tools, storage and communications capability to allow the judicious processing,  |
| *Operational Reconnaissance (Ops Recce) Capability, Analytics/Tool sensors/platforms were originally designed.  | Development provides for increase    | d battlespace awaren                  | ess through the use of sensors/platforms to achieve effects beyond what those  |
| Air Base Ground Defense PE 0205788F - P-40A<br>Ground based air defense capability designed to counter current and of                                       | emerging threats to forward operati  | on locations. Contact                 | AF A3XY 703-614-0402 or A5RE 703-697-9393.   |
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LI 834320 - C3 Countermeasures Air Force

P-1 Line #33

Volume 1 - 252

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834320 / C3 Countermeasures

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule                                  |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Electronic Warfare Integrated Reprogramming (EWIR) |             |          |                       | - / -                                    | - / 0.902                                | - / 1.581                                | - / 1.570                                | - / 0.000                                | - / 1.570                                |
| P-40a           | National Technical Nuclear Forensics               |             |          |                       | - / -                                    | - / 0.000                                | - / 5.852                                | - / 5.711                                | - / 0.000                                | - / 5.711                                |
| P-40a           | Air Base Ground Defense                            |             |          |                       | - / -                                    | - / -                                    | - / -                                    | - / 13.124                               | - / -                                    | - / 13.124                               |
| P-40a           | AF Offensive Cyberspace Operations                 |             |          |                       | - / -                                    | - / 6.332                                | - / 11.774                               | - / 16.990                               | - / 0.000                                | - / 16.990                               |
| P-40a           | AF Defensive Cyberspace Operations                 |             |          |                       | - / -                                    | - / 0.000                                | - / 0.620                                | - / -                                    | - / -                                    | - / -                                    |
| P-40a           | Intel Data Applications                            |             |          |                       | - / -                                    | - / 0.219                                | - / 0.373                                | - / 0.366                                | - / 0.000                                | - / 0.366                                |
| P-40            | Total Gross/Weapon System Cost                     |             |          | - 1 -                 | - / 7.453                                | - / 20.200                               | - / 37.764                               | - / 0.000                                | - / 37.764                               |  |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

This program, C3 Countermeasures P-40A Item Program 1, is a new start.

National Technical Nuclear Forensics PE 0207573F - P-40A

FY17 funding procures terrestrially-based sensors and communications for prompt output signal detection and nuclear debris collection analysis and evaluation to support nuclear event attribution. Funding also includes procurement of technical data and any required follow on system support.

Electronic Warfare Integrated Reprogramming (EWIR) PE 0207439F - P-40A

FY17 funding will replace capital equipment for the electronic warfare (EW) Threat Change Analysis and Distributed Mission Operations infrastructure and databases. Specific equipment items and quantities may change due to mission needs.

AF Offensive Cyberspace Operations PE 0208087F - P-40A

FY18 funding procures computer, computer related memory storage, local and long-haul communications, infrastructure, and unique intelligence and analysis equipment. Details remain classified and will be provided on a need-to-know basis. For further information, please contact AF/A2.

AF Defensive Cyberspace Operations PE 0208088F - P-40A

FY17 OCO procures high-value, mission Operation Enduring Freedom (OEF) networks and systems to assure unobstructed successful operations.

FY17 funding totals include \$.620M appropriated for Overseas Contingency Operations.

No Budget Year FY18 funding requested.

Intel Data Applications PE 0208288F - P-40A

FY17 funding procures equipment to support ground processing functions associated with airborne operations, provide threat simulator validation and intel database development, and provide tactical network indications/warning, intrusion analysis and threat signature development.

Air Base Ground Defense PE 0205788F - P-40A

Ground based air defense capability designed to counter current and emerging threats to forward operation locations. Contact AF A3XY 703-614-0402 or A5RE 703-697-9393.

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P-1 Line #33

Volume 1 - 253

Air Force

| Exhibit P-40, Budget Line Item Justification:   | FY 2018 Air Force                  |                                       |                 | Date: May 2017        |
|---|------------------------------------|---------------------------------------|-----------------|-----------------------|
| Appropriation / Budget Activity / Budget Sub 3080F: Other Procurement, Air Force / BA 03: Equip / BSA 4: Spcl Comm-Electronics Projects | Electronics and Telecommunications | <b>P-1 Line Item N</b> 834320 / C3 Co |                 |                       |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It     | ems: N/A                              | Other Related F | Program Elements: N/A |
| Line Item MDAP/MAIS Code: N/A   |                                    |                                       |                 |                       |
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LI 834320 - C3 Countermeasures Air Force

**Date:** May 2017 Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Items Title:

3080F / 03 / 4

834320 / C3 Countermeasures Electronic Warfare Integrated Reprogramming (EWIR)

|                                |          |                       | F            | Prior Year    | 's                      |                | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Bas    | se                      | FY 2018 OCO |               |                         | FY 2018 Total |               |                         |
|--------------------------------|----------|-----------------------|--------------|---------------|-------------------------|----------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|
| ltem Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost      | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                  |          |                       |              |               |                         |                |               |                         |           |               |                         |           |               |                         |             |               |                         |               |               |                         |
| Client PCs                     | Α        |                       | -            | -             | -                       | 0.010          | 1             | 0.010                   | 0.200     | 1             | 0.200                   | 0.200     | 1             | 0.200                   | -           | -             | 0.000                   | 0.200         | 1             | 0.200                   |
| Computer Server                | Α        |                       | -            | -             | -                       | 0.220          | 1             | 0.220                   | 1.121     | 1             | 1.121                   | 0.660     | 1             | 0.660                   | -           | -             | 0.000                   | 0.660         | 1             | 0.660                   |
| Data Storage System            | Α        |                       | -            | -             | -                       | 0.472          | 1             | 0.472                   | 0.150     | 1             | 0.150                   | 0.505     | 1             | 0.505                   | -           | -             | 0.000                   | 0.505         | 1             | 0.505                   |
| Network Infrastructure         | Α        |                       | -            | -             | -                       | 0.070          | 1             | 0.070                   | 0.060     | 1             | 0.060                   | 0.205     | 1             | 0.205                   | -           | -             | 0.000                   | 0.205         | 1             | 0.205                   |
| Tape Backup System             | Α        |                       | -            | -             | -                       | 0.130          | 1             | 0.130                   | 0.050     | 1             | 0.050                   | -         | -             | -                       | -           | -             | 0.000                   | -             | -             | 0.000                   |
| Subtotal: Uncategorized        |          |                       | -            | -             | -                       | -              | -             | 0.902                   | -         | -             | 1.581                   | -         | -             | 1.570                   | -           | -             | 0.000                   | -             | -             | 1.570                   |
| Total                          |          |                       | -            | -             | -                       | -              | -             | 0.902                   | -         | -             | 1.581                   | -         | -             | 1.570                   | -           | -             | 0.000                   | -             | -             | 1.570                   |
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| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force         | Date: May 2017                       |
|---|-------------------------------|--------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | P-1 Line Item Number / Title: | Aggregated Items Title:              |
| 3080F / 03 / 4  | 834320 / C3 Countermeasures   | National Technical Nuclear Forensics |

|   |                                  |                       | Р         | rior Year     | s                       | FY 2016   |               |                         | FY 2017   |                      |                         | FY        | ′ 2018 Ba            | se                      | FY        | / 2018 OC            | 0                       | FY 2018 Total |               |                         |
|---|----------------------------------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|---------------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]            | ID<br>CD                         | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| National Technical Nucle                  | onal Technical Nuclear Forensics |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |               |               |                         |
| Nuclear Forensics -<br>Prompt Diagnostics | А                                |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 5.852                   | -         | -                    | 5.711                   | -         | -                    | 0.000                   | -             | -             | 5.711                   |
| Subtotal: National Techn<br>Forensics     | ical N                           | uclear                | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 5.852                   | -         | -                    | 5.711                   | -         | -                    | 0.000                   | -             | -             | 5.711                   |
| Total                                     |                                  |                       | -         |               | -                       | -         | -             | 0.000                   | -         | -                    | 5.852                   | -         | -                    | 5.711                   | -         | -                    | 0.000                   | -             | -             | 5.711                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### Remarks:

Continues efforts previously funded by OSD for Prompt Diagnostics. Procures terrestrially-based sensors and communications for prompt output signal detection and nuclear debris collection analysis and evaluation. Funding also includes procurement of technical data and any required follow on system support.

LI 834320 - C3 Countermeasures

Air Force

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | ms: FY 2018 Air Force       | Date: May 2017          |
|---|-----------------------------|-------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | Aggregated Items Title:     |                         |
| 3080F / 03 / 4  | 834320 / C3 Countermeasures | Air Base Ground Defense |

| 00001 / 00 / 1                 | 0001 1001 4 |                       |             |               |                         |           |               | 00+0207 00 00dilleriffeddale3 |           |               |                         |            |               |                         | 7 til Dasc Ground Delense |               |                         |            |               |                         |
|--------------------------------|-------------|-----------------------|-------------|---------------|-------------------------|-----------|---------------|-------------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|---------------------------|---------------|-------------------------|------------|---------------|-------------------------|
|                                |             |                       | Prior Years |               | s                       | FY 2010   |               |                               | FY 2017   |               | FY                      | / 2018 Bas | se            | FY                      | / 2018 OC                 | 0             | FY                      | ′ 2018 Tot | tal           |                         |
| Item Number /<br>Title [DODIC] | ID<br>CD    | MDAP/<br>MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M)       | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost                 | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ABGD1                          |             |                       | ,           |               | ,                       |           |               |                               | ,         |               |                         |            | ,             |                         |                           |               | ,                       |            |               |                         |
| Program 1                      | Α           |                       | -           | -             | -                       | -         | -             | -                             | -         | -             | -                       | 9.086      | 1             | 9.086                   | -                         | -             | -                       | 9.086      | 1             | 9.086                   |
| Subtotal: ABGD1                |             |                       | -           | -             | -                       | -         | -             | -                             | -         |               | •                       | -          | -             | 9.086                   | -                         |               | -                       | -          | -             | 9.086                   |
| ABGD2                          |             |                       |             |               |                         |           |               |                               |           |               |                         |            |               |                         |                           |               |                         |            |               |                         |
| Program 2                      | Α           |                       | -           | -             | -                       | -         | -             | -                             | -         | -             | -                       | 4.038      | 1             | 4.038                   | -                         | -             | -                       | 4.038      | 1             | 4.038                   |
| Subtotal: ABGD2                |             |                       | -           | -             | -                       | -         | -             | -                             | -         | -             | -                       | -          | -             | 4.038                   | -                         | -             | -                       | -          | -             | 4.038                   |
| Total                          |             |                       | -           | -             | -                       | -         | -             | -                             | -         | -             | -                       | -          | -             | 13.124                  | -                         | -             | -                       | -          | -             | 13.124                  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### Remarks:

Ground based air defense capability designed to counter current and emerging threats to forward operation locations. Contact AF A3XY 703-614-0402 or A5RE 703-697-9393.

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:

834320 / C3 Countermeasures

Aggregated Items Title:

AF Offensive Cyberspace Operations

|   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           | '             |                         |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Bas    | se                      | F١        | / 2018 OC            | 0                       | FY        | 2018 Tot      | al                      |
| Item Number /<br>Title [DODIC]            | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| uncategorized                             |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |
| Cyber Mission<br>Platform (CMP)<br>System | A        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 1.664     | 3             | 4.993                   | -         |                      | -                       | 1.664     | 3             | 4.993                   |
| Offensive Cyber<br>Operations Support     | А        |                       | -         | -             | -                       | -         | -             | 6.332                   | -         | -             | 11.774                  | -         | -             | 11.997                  | -         | -                    | 0.000                   | -         | -             | 11.997                  |
| Subtotal: uncategorized                   |          |                       | -         | -             | -                       | -         | -             | 6.332                   | -         | -             | 11.774                  | -         | -             | 16.990                  | -         | -                    | 0.000                   | -         | -             | 16.990                  |
| Total                                     |          |                       | -         | -             | -                       | -         | -             | 6.332                   | -         | -             | 11.774                  | -         | -             | 16.990                  | -         | -                    | 0.000                   | -         | -             | 16.990                  |

| Exhibit P-40a, Budget Item Justification For Aggregated Item | ns: FY 2018 Air Force | Date: May 2017   |
|--|-----------------------|--|
| ,                      |                       | Aggregated Items Title: AF Defensive Cyberspace Operations |

|                                       |             |                       |           |               |                         |           | -             |                         |           |               |                         |           |               |                         |           |               | ,                       |            | - 1           |                         |
|---------------------------------------|-------------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|
|                                       | Prior Years |                       |           | S             |                         | FY 2016   |               |                         | FY 2017   |               | FY                      | / 2018 Ba | se            | FY                      | 2018 OC   | :0            | FY                      | / 2018 Tot | al            |                         |
| Item Number /<br>Title [DODIC]        | ID<br>CD    | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                         |             |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |            |               |                         |
| Defensive Cyber<br>Operations Support | Α           |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.620                   | -         | -             | -                       | -         | -             | -                       | -          | -             | -                       |
| Subtotal: Uncategorized               |             |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.620                   | -         | -             | -                       | -         | -             | -                       | -          | -             | -                       |
| Total                                 |             |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.620                   | -         | -             | -                       | -         | -             | -                       | -          | -             | -                       |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 4

P-1 Line Item Number / Title:
834320 / C3 Countermeasures

Intel Data Applications

| 0000170071                                |              |                       |             |               |                         |           | 00 1020 7 GO GOUINOTHIOGOUIGO |                         |           |               |                         |           |               | mitor Bata Applications |           |               |                         |                |               |                         |
|---|--------------|-----------------------|-------------|---------------|-------------------------|-----------|-------------------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|----------------|---------------|-------------------------|
|   |              |                       | Prior Years |               |                         |           | FY 2016                       | FY 2017                 |           |               | FY 2018 Base            |           |               | F                       | 2018 OC   | 0             | F۱                      | <b>2018 To</b> | tal           |                         |
| Item Number /<br>Title [DODIC]            | ID<br>CD     | MDAP/<br>MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)                 | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost      | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                             | ncategorized |                       |             |               |                         |           |                               |                         |           |               |                         |           |               |                         |           |               |                         |                |               |                         |
| PE 0208288F<br>INTEL DATA<br>APPLICATIONS | A            |                       | -           | -             | -                       | -         | -                             | 0.219                   | -         | -             | 0.373                   | -         | -             | 0.366                   | -         | -             | 0.000                   | -              | -             | 0.366                   |
| Subtotal: Uncategorized                   |              |                       | -           | -             | -                       | -         | -                             | 0.219                   | -         | -             | 0.373                   | -         | -             | 0.366                   | -         | -             | 0.000                   | -              | -             | 0.366                   |
| Total                                     |              |                       | -           | -             | -                       | -         | -                             | 0.219                   | -         | -             | 0.373                   | -         | -             | 0.366                   | -         | -             | 0.000                   | -              | -             | 0.366                   |
| Nata Culstatala an Tai                    | L - I - I    | 41-1- [-              | L:L:L D 40- | 4 1           |                         |           |                               | altina an               |           |               |                         |           |               |                         |           |               |                         |                |               | -                       |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834430 / GCSS-AF Fos

Equip / BSA 4: Spcl Comm-Electronics Projects

ID Code (A=Service Ready). A Program Elements for Code B Items: N/A Other Related Program Elements: 0708012F, 0708610F

Line Item MDAP/MAIS Code: 221

| Line item mbar/maio code. 221                  |                 |                  |                   |                  |                  |                |                 |                |         |         |          |        |
|--|-----------------|------------------|-------------------|------------------|------------------|----------------|-----------------|----------------|---------|---------|----------|--------|
|  | Prior           |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |                |         |         | То       |        |
| Resource Summary                               | Years           | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -               | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | 0.696           | 5.296            | 1.743             | 2.826            | 0.000            | 2.826          | 7.317           | 11.454         | 6.182   | 9.072   | -        | 44.586 |
| Less PY Advance Procurement (\$ in Millions)   | -               | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | 0.696           | 5.296            | 1.743             | 2.826            | 0.000            | 2.826          | 7.317           | 11.454         | 6.182   | 9.072   | -        | 44.586 |
| Plus CY Advance Procurement (\$ in Millions)   | -               | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | 0.696           | 5.296            | 1.743             | 2.826            | 0.000            | 2.826          | 7.317           | 11.454         | 6.182   | 9.072   | -        | 44.586 |
| (The following                                 | g Resource Sumi | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | ed elsewhere.) | •       |         |          |        |
| Initial Spares (\$ in Millions)                | -               | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Millions)             | -               | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -               | -                | -                 | -                | -                | -              | -               | -              | -       | -       | -        |        |

## **Description:**

Global Combat Support System (GCSS) is a family of information technology systems that provide integration and interoperability between combat support functions and command and control to support the operational needs of the warfighter. It directly supports Command, Control, Communication, Computers, and Information (C4I) for the warfighter and Chairman Joint Chiefs of Staff (CJCS) Joint Vision 2020. The GCSS-Air Force Family of Systems (FOS) includes standard base-level combat support applications which provide warfighters with a "one update-one time" processing environment. The following systems provide the key support foundation for the Air Force's global engagement strategy and evolution to DoD Joint Information Environment (JIE) leveraging Core Data Centers (CDCs) and DISA-brokered cloud capabilities through GCSS-AF.

PE 0708012F LOGISTICS SUPPORT ACTIVITY

CARGO MOVEMENT OPERATIONS SYSTEM (CMOS): CMOS supports base-level and theater distribution management. The system consist of the CMOS software operating in the DISA enclave and specific peripherals as a means to transact data. These peripherals consist of handheld terminals with CMOS specific software installed, docking stations, cables and thermal transfer printers configured to communicate with CMOS. This initiative supports the implementation of approximately 215 Army and Navy sites.management.

Funding for this exhibit contained in PE 0708012F.

PE 0708610F LOGISTICS INFORMATION TECHNOLOGY (LOGIT)

The Air Force logistics enterprise is comprised of multiple overarching functional areas, to include maintenance, repair and overhaul, end-to-end supply chain support, base supply inventories, and predictive analysis and forecasting. Enterprise Logistics Systems deliver integrated logistics information driving war winning decisions by shaping, acquiring, and sustaining warfighting IT capabilities and mission support. OPAF funding will be used for capital equipment replacement to include servers and will also be used to purchase multi-year software licenses.

Systems contained in these business areas include, but are not limited to, the Air Force Equipment Management System (AFEMS), Integrated Maintenance Data System (IMDS), Reliability and Maintainability Information System (REMIS), Combat Ammunitions System (CAS), Enhanced Maintenance Operations Center (EMOC), Aircraft Structural Integrity Management Information System (ASIMIS), Integrated Logistics System-Supply (ILS-S), Cargo Movement Operations System (CMOS), Stock Control System (SCS), Purchase Request Process System (PRPS), Automated Logistics Management Support System (ALMSS), Depot Maintenance Accounting and Production System (DMAPS), Enhanced Technical Information Management System (ETIMS), and Weapon System Management Information System (WSMIS).

 LI 834430 - GCSS-AF Fos
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 Air Force
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 P-1 Line #34

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|--|--|---|---|
| Exhibit P-40, Budget Line Item Justification: FY 2018  | 3 Air Force                            |   | <b>Date</b> : May 2017  |
| Appropriation / Budget Activity / Budget Sub Activity 3080F: Other Procurement, Air Force / BA 03: Electronic Equip / BSA 4: Spcl Comm-Electronics Projects  |  | P-1 Line Item Number / Ti<br>834430 / GCSS-AF Fos | tle:  |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It         | rems: N/A   | Other Related Program Elements: 0708012F, 0708610F                      |
| Line Item MDAP/MAIS Code: 221  |  |   |   |
| Funding for this exhibit contained in PE 0708610F.   |  |   |   |
| Justification:<br>PE 0303141F GLOBAL COMBAT SUPPORT SYSTEM   |  |   |   |
| No FY 18 funding requested.  |  |   |   |
| PE 0708012F LOGISTICS SUPPORT ACTIVITY   |  |   |   |
| CARGO MOVEMENT OPERATIONS SYSTEM: The FY18 procurem  | ent dollars procure the various mixe   | s of hardware, software and licensir              | ng to install CMOS at 60 new sites.                                     |
| PE 0708610F LOGISTICS INFORMATION TECHNOLOGY (LOGIT)   |  |   |   |
| The Air Force logistics enterprise is comprised of multiple overarching analysis and forecasting. Enterprise Logistics Systems deliver integral OPAF funding will be used for capital equipment replacement to include | ated logistics information driving war | winning decisions by shaping, acqu                | uiring, and sustaining warfighting IT capabilities and mission support. |
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 P-1 Line #34
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**Date:** May 2017 Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 834470 / Defense Enterprise Accounting and Mgmt System

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N87

ID Code (A=Service Ready, B=Not Service Ready): A

|   | Prior         |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |        |
|---|---------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|--------|
| Resource Summary                              | Years         | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)          | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)     | 4.489         | 4.755            | 0.000             | 1.514            | 0.000            | 1.514          | 0.808           | 1.919         | 0.000   | 3.131   | 0.000    | 16.616 |
| Less PY Advance Procurement (\$ in Millions)  | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)        | 4.489         | 4.755            | 0.000             | 1.514            | 0.000            | 1.514          | 0.808           | 1.919         | 0.000   | 3.131   | 0.000    | 16.616 |
| Plus CY Advance Procurement (\$ in Millions)  | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)   | 4.489         | 4.755            | 0.000             | 1.514            | 0.000            | 1.514          | 0.808           | 1.919         | 0.000   | 3.131   | 0.000    | 16.616 |
| (The following                                | Resource Sumi | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |        |
| Initial Spares (\$ in Millions)               | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Dollars)             | -             | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -             | -                | -                 | -                | -                | =              | -               | -             | -       | -       | -        | =      |

## Description:

To enhance transparency, in FY 2015 DEAMS Other Procurement Air Force (OPAF) funding was transferred from Weapon System Code (WSC) 834430, Global Combat Support System - Air Force Family of Systems (GCSS-AF FOS) to WSC 834470 DEAMS. Prior to FY 2015, DEAMS OPAF funding was shown in WSC 834430, GCSS-AF FOS.

Defense Enterprise Accounting and Management System (DEAMS) is a commercial-off-the-shelf (COTS). Oracle-based software implementation effort that will provide an auditable, modern accounting and finance system. DEAMS is a Joint United States Air Force (USAF) and United States Transportation Command (USTRANSCOM) Enterprise Resource Planning (ERP) Program that will replace many existing accounting and finance legacy systems and will provide core funds execution management functions consistent with financial management laws, regulations and policy, general ledger, funds management, payments, receivables, cost and revenues, and fiduciary reporting. DEAMS is compliant with the Clinger-Cohen Act, Business Enterprise Architecture (BEA), and integrates into Global Combat Support System-Air Force (GCSS-AF). When fully deployed, DEAMS will be key to Air Force compliance with the Financial Improvement and Audit Readiness (FIAR) requirement in the 2010 NDAA.

DEAMS Inc 1 is planned as:

Release 1 - Air Mobility Command (AMC) without Transportation Working Capital Funds (TWCF)

Release 2 - AMC with TWCF, Defense Finance and Accounting Service (DFAS) Rome

Release 3 - Air Combat Command (ACC) and Air Force Global Strike Command (AFGSC)

Release 4 - Air Force Reserve Command (AFRC), and Air National Guard (ANG) Geographically Separated Units (GSUs) to include DFAS Limestone, Air Force District of Washington (AFDW), Air Force Special Operations Command (AFSOC), U.S. Air Force Academy (USAFA), Pacific Air Forces (PACAF), and DFAS Japan

Release 5 - U. S. Air Forces in Europe (USAFE), DFAS Europe, and Air Education and Training Command (AETC), Joint Base San Antonio

Release 6 - Air Force Material Command (AFMC) (Test Bases)

DEAMS Inc 1 is transitioning to the Operation and Support (O&S) phase post Milestone C to support deployed locations.

DEAMS reported MAIS Critical Change in the 31 May 2016 Defense Acquisition Executive Summary (DAES). The program did not meet the original estimate schedule threshold for the Full Deployment Decision (FDD) in August 2015. DEAMS Inc 1 capability will continue to be deployed in FY2016 - FY2020 as approved by the Milestone Decision Authority.

The schedule includes an Oracle R12 upgrade transition to a new production environment and reporting, DCAS, Direct Disbursements, and Audit functionality.

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|---|--|---|--|--|
| Exhibit P-40, Budget Line Item Justification:   | FY 2018 Air Force                              |   | <b>Date</b> : May 2017                                 |  |
| Appropriation / Budget Activity / Budget Sub<br>3080F: Other Procurement, Air Force / BA 03: E<br>Equip / BSA 4: Spcl Comm-Electronics Projects | Electronics and Telecommunications             | P-1 Line Item Numb<br>834470 / Defense En |  |  |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B Ite                | ems: N/A                                  | Other Related Program Elements: N/A                    |  |
| Line Item MDAP/MAIS Code: N87   |  |   |  |  |
| DEAMS Inc 1 funding through FY 2020 is to support the lis   | ted deployments. DEAMS Inc 2 will require lice | enses to support acquisition              | requirements for AFSPACE and AFMC starting in FY 2022. |  |
| Procurement funding for DEAMS is in PE 0901538F, Finar  |  |   |  |  |
| Procurement funding for DEAMS is in PE 090 1536F, Final   | iciai iniormation Management Systems Develo    | pment (Finiso).                           |  |  |
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LI 834470 - Defense Enterprise Accounting and Mgmt S... Air Force

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834470 / Defense Enterprise Accounting and Mgmt System

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Item MDAP/MAIS Code: N87

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule                                    |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | Financial Management Information Systems Development |             | Α        |                       | - /4.489                                 | - / 4.755                                | - / 0.000                                | - /1.514                                 | - / 0.000                                | - / 1.514                                |
| P-40            | Total Gross/Weapon System Cost                       |             |          |                       | - / 4.489                                | - / 4.755                                | - / 0.000                                | - / 1.514                                | - / 0.000                                | - / 1.514                                |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

### Justification:

Funds are used to procure software licenses and other potential hardware using multiple contracts and various vendors. Software license counts are estimates and may vary at actual execution based on system needs.

This Funding request will support potential DMS and obsolescence solutions, to include if optimal, life of type buys or bridge buys limited to the program of record quantity. This program element may include necessary civilian pay expenses required to manage, execute, and deliver DEAMS system capability.

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| Exhibit P-5, Cost Analysis: FY 2018 Air Force                         | Date: May 2017  |
|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 | Item Number / Title [DODIC]: - / Financial Management Information Systems Development |

| ID Code (A=Service Ready, B=Not Service Ready) : A       | ·                           | М                         | DAP/MAIS Code:           |              |             |               |
|--|-----------------------------|---------------------------|--------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                   | FY 2017                  | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | -                         | -                        | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)                | 4.489                       | 4.755                     | 0.000                    | 1.514        | 0.000       | 1.514         |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                         | -                        | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | 4.489                       | 4.755                     | 0.000                    | 1.514        | 0.000       | 1.514         |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                         | -                        | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)              | 4.489                       | 4.755                     | 0.000                    | 1.514        | 0.000       | 1.514         |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget request | s are documented elsewhe | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                         | -                        | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Dollars)            | -                           | -                         | -                        | -            | -           | -             |

|                                    | Р         | rior Years    | 5                       |           | FY 2016       |                         |           | FY 2017       |                         | F۱        | / 2018 Bas    | se                      | F         | 2018 OC       | 0                       | F         | / 2018 Tot    | al                      |
|------------------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements                      | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Software - DEAMS Cost              |           |               |                         | '         |               |                         |           |               |                         | '         |               | '                       |           |               |                         |           |               |                         |
| Recurring Cost                     |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Hardware/Software                  | -         | -             | 4.489                   | -         | -             | 4.755                   | -         | -             | 0.000                   | -         | -             | 1.514                   | -         | -             | 0.000                   | -         | -             | 1.514                   |
| Subtotal: Recurring Cost           | -         | -             | 4.489                   | -         | -             | 4.755                   | -         | -             | 0.000                   | -         | -             | 1.514                   | -         | -             | 0.000                   | -         | -             | 1.514                   |
| Subtotal: Software - DEAMS<br>Cost | -         | -             | 4.489                   | -         | -             | 4.755                   | -         | -             | 0.000                   | -         | -             | 1.514                   | -         | -             | 0.000                   | -         | -             | 1.514                   |
| Gross/Weapon System<br>Cost        | -         | -             | 4.489                   | -         | -             | 4.755                   | -         | -             | 0.000                   | -         | -             | 1.514                   | -         | -             | 0.000                   | -         | -             | 1.514                   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834520 / Theater Battle Mgt C2 System

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207410F

Other Related Program Elements: 0207410F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior        |                  |                    | FY 2018          | FY 2018         | FY 2018        |                 |               |         |         | То       |        |
|--|--------------|------------------|--------------------|------------------|-----------------|----------------|-----------------|---------------|---------|---------|----------|--------|
| Resource Summary                               | Years        | FY 2016          | FY 2017            | Base             | oco             | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -            | -                | -                  | -                | -               | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | 0.000        | 7.473            | 9.659              | 9.646            | 0.000           | 9.646          | 9.280           | 9.446         | 9.617   | 9.792   | -        | 64.913 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -               | -              | -               | -             | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | 0.000        | 7.473            | 9.659              | 9.646            | 0.000           | 9.646          | 9.280           | 9.446         | 9.617   | 9.792   | -        | 64.913 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -               | -              | -               | -             | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | 0.000        | 7.473            | 9.659              | 9.646            | 0.000           | 9.646          | 9.280           | 9.446         | 9.617   | 9.792   | -        | 64.913 |
| (The following                                 | Resource Sum | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget request | s are documente | d elsewhere.) |         |         |          |        |
| Initial Spares (\$ in Millions)                | -            | -                | -                  | -                | -               | -              | -               | -             | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                  | -                | -               | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                  | -                | -               | -              | -               | -             | -       | -       | -        | -      |

## **Description:**

Theater Battle Management Core Systems Force Level (TBMCS FL): An integrated battle management system used to plan, execute, and assess an air campaign. It provides automated planning tools enabling consistent, coordinated battle management at both Air and Space Operations Centers (AOC) and non-AOC entities for operations and intelligence functions. TBMCS FL is a United States Air Force lead system with joint interest responsible for generation and dissemination of the Air Tasking Order and interoperates with allied units.

Unit Command and Control (UC2): Provides the wing and base commanders, and their battle staffs with timely and accurate information for effective decision making. UC2 also provides secure, automated, deployable, and distributed wing-level command and control system with connectivity to TBMCS systems.

Personnel Recovery Command and Control (PRC2): Provides PRC2 services supporting all Combatant Commands, Joint Services and other government agencies. Capabilities include web-based access to isolated personnel reports for all Department of Defense (DoD) personnel, C2 tools for performing command and control of recovery efforts for downed airmen/isolated ground troops, and rapid identification of personnel in distress. PRC2 is used within AOC/Areas Of Responsibility (AOR), Joint Personnel Recovery Centers, and Rescue Coordination Centers to provide the capabilities and services for planning and executing recovery of isolated personnel, and rapidly collaborate, disseminate, and store time-sensitive personnel recovery information.

In FY 2018, Personnel Recovery Command and Control (PRC2) efforts were transferred from PE 0207410F, Air & Space Operations Center (AOC) to PE 0305984F, Personnel Recovery Command & Ctrl (PRC2), in order to improve visibility on Service's fair share of procurement funding for this joint interest program.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PE 0207410F and PE 0305984F.

#### Justification:

1. TBMCS FL: Provides the Joint and Combined Air Component Commander with the automated tools necessary to effectively and efficiently plan, monitor, and execute the air campaign. This includes planning and issuing the Air Tasking and Airspace Control Orders that ensure the theater commander's intent is supported through the application of airpower using the latest intelligence. FY18 funding will continue

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement. Air Force / BA 03: Electronics and Telecommunications

P-1 Line Item Number / Title:
834520 / Theater Battle Mgt C2 System

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0207410F

Other Related Program Elements: 0207410F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

fielding TBMCS FL to include security patches, vendor update patches, operating system upgrades, and DoD mandated policy updates. TBMCS FL will also continue Capital Equipment Replacement (CER) to the systems to maintain security posture and field updates to more than 40 locations.

- a. TBMCS FL PROGRAM MANAGEMENT ADMINISTRATION (PMA): FY18 funding includes provisions for government contract oversight, technical expertise, and program office support associated with the fielding of TBMCS FL.
- b. TBMCS FL TRAINING & FIELDING: FY18 funding will continue to support fielding of the TBMCS FL upgrades and specialized training at each location.
- c. TBMCS FL: FY18 funds will continue to be used to procure hardware and associated software licenses for fielding to various sites.
- 2. UNIT COMMAND AND CONTROL (UC2): Provides the wing and base commanders and their battle staffs with timely and accurate information for effective decision making. UC2 also provides secure, automated, deployable, and distributed wing-level command and control system with connectivity to TBMCS FL systems. Enhanced unit-level operations capabilities will be provided through the UC2 project. FY18 funding will continue to support fielding of modernized equipment at 16 active duty locations.
- a. UC2 HARDWARE AND COMMERCIAL-OFF-THE-SHELF (COTS) SOFTWARE: FY18 funds will continue to replace clients, servers, miscellaneous hardware, and associated software licenses for UC2 sites.
- b. UC2 PMA: FY18 funding includes provisions for government contract oversight, technical expertise, and program office support associated with the fielding of UC2.
- 3. PERSONNEL RECOVERY COMMAND AND CONTROL (PRC2): Provides PRC2 services supporting all Combatant Commands, Joint Services and other government agencies. Capabilities include webbased access to isolated personnel reports for all DoD personnel, C2 tools for performing command and control of recovery efforts for downed airmen/isolated ground troops, and rapid identification of personnel in distress. PRC2 is used within AOC/AOR, Joint Personnel Recovery Centers, and Rescue Coordination Centers to provide the capabilities and services for planning and executing recovery of isolated personnel, and rapidly collaborate, disseminate, and store time-sensitive personnel recovery information. FY18 funding will continue to support PRC2 operations.
- a. PRC2 HARDWARE AND COTS SOFTWARE: FY18 funding will continue procure various hardware pieces and associated software licenses for fielding to various sites.
- b. PRC2 PMA: FY18 funding will provide for government program oversight, technical expertise, and program office support associated with the fielding of PRC2.

**Exhibit P-40, Budget Line Item Justification:** FY 2018 Air Force **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834530 / Air & Space Operations Ctr-WPN SYS

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior        |                  |                    | FY 2018          | FY 2018         | FY 2018         |               |               |         |         | То       |         |
|--|--------------|------------------|--------------------|------------------|-----------------|-----------------|---------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years        | FY 2016          | FY 2017            | Base             | oco             | Total           | FY 2019       | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 9.993            | 15.474             | 25.533           | 0.000           | 25.533          | 36.081        | 36.527        | 37.270  | 42.163  | -        | 203.041 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -               | -               | -             | =             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 9.993            | 15.474             | 25.533           | 0.000           | 25.533          | 36.081        | 36.527        | 37.270  | 42.163  | -        | 203.041 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 9.993            | 15.474             | 25.533           | 0.000           | 25.533          | 36.081        | 36.527        | 37.270  | 42.163  | -        | 203.041 |
| (The following                                 | Resource Sum | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget requests | are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |

## **Description:**

The Air Operations Center Weapon System (AOC WS), AN/USQ-163 Falconer, the senior element of the Theater Air Control System, is the weapon system that the Commander, Air Force Forces (COMAFFOR) provides the Combined/Joint Force Air Component Commander (C/JFACC) for monitoring, planning, executing and assessing theater-wide air and space operations in support of the air battle campaign to meet the Combined/Joint Force Commander's (C/JFC) objectives.

The AOC WS contains over 40 Command and Control (C2) systems/applications (3rd Party Commercial Off the Shelf (COTS)/Government Off the Shelf (GOTS)) that are continually being updated under semi-annual/annual/bi-annual efforts (i.e., Baseline Releases [BR]). The AOC WS 10.1 integrates these changes as well as provides periodic Capital Equipment Replacement (CER) to keep the AOC WS interoperable, supportable, and compliant (e.g., certification and accreditation). Fielding will provide Joint C2 interoperability, and respond to the highest priority Combatant Command (CCMD) interoperability problems including: (a) incorporating fixes to shortfalls in interactions with CCMD targeting support systems, (b) enhancing the effectiveness of the operational picture to respond to the proliferation of sensors, and (c) handling data interface changes being experienced with older 3rd Party program deliveries. Major subsystems have enhanced their security profile and this fielding will serve as a re-accreditation of the overall AOC WS baseline. This profile provides an excellent transition point for the AOC WS 10.2 modernization baseline. Primary efforts in fielding include CER and baseline updates via variously sized BRs. BRs are regularly scheduled 3rd Party COTS/GOTS application updates. They are normally comprised of hardware/software changes/updates/modernized improvements/modifications and security patches. Each BR is based on warfighter-validated needs that require updates to the AOC WS 10.1.

The AOC WS funding provides system hardware, software, technical documents, CER (e.g., replacing end-of-life/end of support Direct Mission Support (DMS) and 3rd Party components with solutions that will bridge between 10.1 and 10.2), core radio and initial training to standardize and sustain the AOC WS. This includes the integration, test and fielding of cyber security improvements and existing 3rd Party modernized improvements/modifications (e.g., replace paper copy with electronic requests). The fielding and CER consist of AOCs and their associated support sites (e.g., Help Desk, Formal Training Unit (FTU), experimental sites, and Air Reserve Component sites).

There are three distinct categories of AOCs: Geographic, Global (formally known as Functional), and assorted AOC Support Functions (Help Desk, FTU, Operational Support Facility (OSF) and Air Reserve Component sites). While all sites start with the standardized 10.1 baseline, each is specifically tailored to the needs of the associated Geographic CCMD or Global (formally known as Functional) Command. Thus, as no two AOCs are alike, when a CER or BR is accomplished, each site is unique and requires its own specifically designed site-engineered fielding plan and associated hardware, which drives differences in site specific (i.e., unit) costs.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

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Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834530 / Air & Space Operations Ctr-WPN SYS

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PE 0207410F.

| Secondar               | ry Distribution            | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 9.993   | 15.074  | 24.633          | -              | 24.633           | 1.251   | 1.289   | 2.228   | 1.368   |
| AFNG                   | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 0.000   | 0.300   | 0.600           | -              | 0.600            | 0.600   | 0.600   | -       | 0.600   |
| AFR                    | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 0.000   | 0.100   | 0.300           | -              | 0.300            | 0.300   | 0.300   | -       | 0.300   |
| Total:                 | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
| Secondary Distribution | Total Obligation Authority | 9.993   | 15.474  | 25.533          | -              | 25.533           | 2.151   | 2.189   | 2.228   | 2.268   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834530 / Air & Space Operations Ctr-WPN SYS

Equip / BSA 4: Spcl Comm-Electronics Projects

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule                  |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|------------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                             | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | Air & Space Operations Ctr-WPN SYS |             | Α        |                       | - / -                                    | - / 9.993                                | - / 15.474                               | - / 25.533                               | - / 0.000                                | - / 25.533                               |
| P-40            | Total Gross/Weapon System Cost     |             |          |                       | - 1 -                                    | - / 9.993                                | - / 15.474                               | - / 25.533                               | - / 0.000                                | - / 25.533                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

### Justification:

- 1. FIELDING: Primary efforts include integration and fielding of improvements/upgrades of existing 3rd Party applications as well as newly developed replacement applications, CER (replacing end-of-life/end of support components) and baseline updates via variously sized BRs.
- a. CAPITAL EQUIPMENT REPLACEMENT (CER): FY18 funds address numerous commercial end-of-life and DMS components including components associated with C2 applications (3rd Party COTS/GOTS) that must be resolved
- b. BASELINE RELEASES (BR): FY18 will fund BRs, periodic maintenance upgrades, emergency fixes, cyber security improvements and other activities (e.g., testing activities).
- c. FIELDING SYSTEM PROGRAM OFFICE (SPO) SUPPORT: FY18 funds will be used to provide government oversight, technical expertise, and program office support associated with the fielding of AOC.
- d. TEST SUPPORT (46 Test Squadron [46TS]): FY18 funds will be used to provide government oversight and technical expertise associated with the testing of AOC.

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**Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 3080F / 03 / 4 834530 / Air & Space Operations Ctr-WPN SYS - / Air & Space Operations Ctr-WPN SYS

MDAR/MAIS Codo:

| ID COde (A=Service Ready, B=Not Service Ready) : A     |                              | IVIL                      | DAP/IVIAIS Code:          |              |             |               |
|--|------------------------------|---------------------------|---------------------------|--------------|-------------|---------------|
| Resource Summary                                       | Prior Years                  | FY 2016                   | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                   | -                            | -                         | -                         | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)              | -                            | 9.993                     | 15.474                    | 25.533       | 0.000       | 25.533        |
| Less PY Advance Procurement (\$ in Millions)           | -                            | -                         | -                         | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                 | -                            | 9.993                     | 15.474                    | 25.533       | 0.000       | 25.533        |
| Plus CY Advance Procurement (\$ in Millions)           | -                            | -                         | -                         | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)            | -                            | 9.993                     | 15.474                    | 25.533       | 0.000       | 25.533        |
| (The following Resource Summary rows are for informati | ional purposes only. The cor | responding budget request | s are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                        | -                            | -                         | -                         | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)         | -                            | -                         | -                         | -            | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A Coming Books B Not Coming Books): A

|  | P         | rior Years    | 3                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | F۱        | / 2018 OC     | 0                       | F۱        | / 2018 Tot    | tal                     |
|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements  | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - Hardware End Ite  | em Cost   |               |                         | '         |               |                         | '         |               |                         | '         |               |                         | '         |               |                         | '         |               |                         |
| Recurring Cost   |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| 1.a.1. CAPTIAL EQUIPMENT REPLACEMENT: GEOGRAPHIC/ GLOBAL (formerly known as Functional) AOC - AD | -         | -             | -                       | -         | -             | 0.165                   | -         | -             | 0.000                   | -         | -             | 1.500                   | -         | -             | -                       | -         | -             | 1.                      |
| 1.a.2. CAPITAL EQUIPMENT REPLACEMENT: AOC SUPPORT SITES - AD                                     | -         | -             | -                       | -         | -             | 0.545                   | -         | -             | 2.967                   | -         | -             | 1.825                   | -         | -             | -                       | -         | -             | 1.                      |
| 1.a.3. CAPITAL EQUIPMENT REPLACEMENT: AOC EXPERIMENTAL SITES - AD                                | -         | -             | -                       | -         | -             | 1.575                   | -         | -             | 2.055                   | -         | -             | 2.112                   | -         | -             | -                       | -         | -             | 2                       |
| 1.a.4. CAPITAL<br>EQUIPMENT<br>REPLACEMENT -<br>RESERVE  | -         | -             | -                       | -         | -             | 0.104                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | С                       |
| 1.a.5: CAPITAL<br>EQUIPMENT<br>REPLACEMENT -<br>GUARD  | -         | -             | -                       | -         | -             | 0.052                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | (                       |

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Exhibit P-5, Cost Analysis: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

3080F / 03 / 4

834530 / Air & Space Operations Ctr-WPN SYS

- / Air & Space Operations Ctr-WPN SYS

ID Code (A=Service Ready, B=Not Service Ready): A

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

MDAP/MAIS Code:

|   | F         | Prior Years          | 3                       |           | FY 2016       |                         |           | FY 2017       |                         | F`        | Y 2018 Ba     | se                      | F         | Y 2018 OC     | 0                       | F`        | Y 2018 Tot           | al                      |
|---|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|
| Cost Elements   | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| 1.b.1. BASELINE<br>RELEASE: AOC<br>SITES - AD           | -         | -                    | -                       | -         | -             | 0.109                   | -         | -             | 1.180                   | -         | -             | 3.450                   | -         | -             | -                       | -         | -                    | 3.450                   |
| 1.b.2. BASELINE<br>RELEASE: SUPPORT<br>SITES - AD       | -         | -                    | -                       | -         | -             | 0.048                   | -         | -             | 0.600                   | -         | -             | 3.950                   | -         | -             | -                       | -         | -                    | 3.950                   |
| 1.c. FIELDING SPO<br>SUPPORT                            | -         | -                    | -                       | -         | -             | 5.001                   | -         | -             | 4.482                   | -         | -             | 7.196                   | -         | -             | -                       | -         | -                    | 7.196                   |
| 1.d. TEST SUPPORT<br>(46TS)                             | -         | -                    | -                       | -         | -             | 0.679                   | -         | -             | 0.260                   | -         | -             | 1.500                   | -         | -             | -                       | -         | -                    | 1.500                   |
| Subtotal: Recurring Cost                                | -         | -                    | -                       | -         | -             | 8.278                   | -         | -             | 11.544                  | -         | -             | 21.533                  | -         | -             | -                       | -         | -                    | 21.533                  |
| Subtotal: Hardware -<br>Hardware End Item Cost          | -         | -                    | -                       | -         | -             | 8.278                   | -         | -             | 11.544                  | -         | -             | 21.533                  | -         | -             | -                       | -         | -                    | 21.53                   |
| Support - Support End Item C                            | Cost      |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |
| 2.a. PROGRAM MANAGEMENT ADMINISTRATION: PROGRAM SUPPORT | -         | -                    | -                       | -         | -             | 1.715                   | -         | -             | 3.930                   | -         | -             | 4.000                   | -         | -             | -                       | -         | -                    | 4.000                   |
| Subtotal: Support - Support<br>End Item Cost            | -         | -                    | -                       | -         | -             | 1.715                   | -         | -             | 3.930                   | -         | -             | 4.000                   | -         | -             | -                       | -         | -                    | 4.000                   |
| Gross/Weapon System<br>Cost                             | -         | -                    | -                       | -         | -             | 9.993                   | -         | -             | 15.474                  | -         | -             | 25.533                  | -         | -             | 0.000                   | -         | -                    | 25.533                  |

#### Remarks

- 1). Due to different levels of complexity, differences in equipment to be updated, and length of required time necessary for modification, the total cost will fluctuate between fiscal years.
- 2). Differences in site specific setup (due to variations between mission specific needs and differences in site type i.e., Geographic vs. Global (formally known as Functional) vs. Associated Support Site vs. Air Reserve Component Sites) will drive differences in site specific requirements (e.g., time required, hardware required and software required). This makes quantification impossible, as there is no single baseline to produce a quantity against. Per DoD Financial Regulation 7000.14-R, Volume 2B, Chapter 4, Exhibit P-5 Instruction, the quantities in the P-5 are left blank as there is no way to report applicable quantities.

| Secondar | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|----------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF       | Quantity                   | -       | -       | -               | -              | -                |
|          | Total Obligation Authority | 9.993   | 15.074  | 24.633          | -              | 24.633           |
| AFNG     | Quantity                   | -       | -       | -               | -              | -                |
|          | Total Obligation Authority | 0.000   | 0.300   | 0.600           | -              | 0.600            |
| AFR      | Quantity                   | -       | -       | -               | -              | -                |
|          | Total Obligation Authority | 0.000   | 0.100   | 0.300           | -              | 0.300            |
| Total:   | Quantity                   | -       | -       | -               | -              | -                |

UI

| Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number | 17                       |
|--|--------------------------|
|  | / Title [DODIC]:         |
| 3080F / 03 / 4 834530 / Air & Space Operations Ctr-WPN SYS - / Air & Space                       | e Operations Ctr-WPN SYS |
| ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:                                |                          |

| 30001 7 03 7 4                      |                            | 004000 / All & Opace Of | berations off-vvi iv o | 10              | All & Space Opera | uons cu-vvi iv 515 |
|-------------------------------------|----------------------------|-------------------------|------------------------|-----------------|-------------------|--------------------|
| ID Code (A=Service Ready, B=Not Ser | rvice Ready):A             |                         | MDAP/MAIS Code         | ):              |                   |                    |
| Se                                  | condary Distribution       | FY 2016                 | FY 2017                | FY 2018<br>Base | FY 2018<br>OCO    | FY 2018<br>Total   |
| Secondary Distribution              | Total Obligation Authority | 9.993                   | 15.474                 | 25.533          | 0.000             | 25.533             |
|                                     |                            |                         |                        |                 |                   |                    |
|                                     |                            |                         |                        |                 |                   |                    |
|                                     |                            |                         |                        |                 |                   |                    |
|                                     |                            |                         |                        |                 |                   |                    |
|                                     |                            |                         |                        |                 |                   |                    |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 834560 / Air Operations Center (AOC) 10.2

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: 0605458F ID Code (A=Service Ready, B=Not Service Ready): B

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/2

| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020       | FY 2021 | FY 2022 | To<br>Complete | Total   |
|--|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|---------------|---------|---------|----------------|---------|
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 14.846           | 30.623            | 0.000            | 0.000            | 0.000            | 5.756           | 52.920        | 52.114  | 0.000   | -              | 156.259 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Net Procurement (P-1) (\$ in Millions)         | -              | 14.846           | 30.623            | 0.000            | 0.000            | 0.000            | 5.756           | 52.920        | 52.114  | 0.000   | -              | 156.259 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Total Obligation Authority (\$ in Millions)    | -              | 14.846           | 30.623            | 0.000            | 0.000            | 0.000            | 5.756           | 52.920        | 52.114  | 0.000   | -              | 156.259 |
| (The following                                 | Resource Sum   | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request   | s are documente | d elsewhere.) |         | i e     |                |         |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |

## Description:

NOTE: Due to the approved ICE on 7 Oct 16 and AOC 10.2 2016 Critical Change, no Other Procurement, Air Force FY 2018 funding is requisted and no funding is required until FY 2019.

NOTE: AOC 10.2 Other Procurement. Air Force FY 2016 early to need funding is being repurposed as Rapid Acquisition Authority for the U.S. Air Force Counter small Unmanned Aerial System (CsUAS) Capabilities, JEON (ST-0008).

The Air Operations Center Weapon System (AOC WS), AN/USQ-163 Falconer, the senior element of the Theater Air Control System (TACS), is the weapon system the Commander, Air Force Forces (COMAFFOR) provides the Combined/Joint Force Air Component Commander (C/JFACC) for planning, executing, and assessing theater-wide air and space operations. The C/JFACC provides air, space and cyber support to the Combined/Joint Forces Commander (C/JFC) by coordinating, deconflicting and assessing the progress of various weapon systems to advance the C/JFC's campaign. The AOC WS develops operations strategy and planning documents. The AOC WS also disseminates tasking orders; executes day-to-day peacetime and combat air, space and cyber operations; and provides rapid reaction to immediate situations by exercising positive control of friendly forces.

Relative to AOC 10.1, the AOC 10.2 system is expected to provide faster speed of command, improved cyber security and data integrity, and afford easier and faster integration of 3rd Party capabilities. The AOC 10.2 funding provides system hardware, software, technical documents, and initial training to field the weapon system 10.2 program baseline. The fielding efforts focus on, but are not limited to, six Geographic AOCs. The restructured AOC 10.2 program includes iterative baseline updates to keep pace with evolving Commercial Off the Shelf (COTS)/Government Off the Shelf (GOTS)/Capital Equipment Replacement (CER) cyber security needs and will be fielded as the 10.2.0, 10.2.1 and 10.2.2 baselines.

The AOC 10.2 is currently in the Engineering and Manufacturing Development (EMD) phase. Since the program underwent a MAIS Critical Change in 2016, Milestone C (MS C) is now projected for Jan 2019. Initial Operational Test & Evaluation (IOT&E) is projected to begin Jan 2019 and continue through April 2019. Full Deployment Decision (FDD) is projected for Dec 2019. These efforts are using Research. Development, Test & Evaluation (RDT&E) funds in PE 0605458F.

Funding for this exhibit is contained in PE 0207410F.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834560 / Air Operations Center (AOC) 10.2

Equip / BSA 4: Spcl Comm-Electronics Projects

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0605458F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N42

|                 | Exhibits Schedule                |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|----------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                           | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | Air Operations Center (AOC) 10.2 |             | В        |                       | - / -                                    | - / 14.846                               | - / 30.623                               | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40            | Total Gross/Weapon System Cost   |             |          |                       | - 1 -                                    | - / 14.846                               | - / 30.623                               | - / 0.000                                | - / 0.000                                | - / 0.000                                |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

### Justification:

No FY 2018 funding requested.

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Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 4

P-1 Line Item Number / Title:
834560 / Air Operations Center (AOC) 10.2

Item Number / Title [DODIC]:
- / Air Operations Center (AOC) 10.2

| ID Code (A=Service Ready, B=Not Service Ready) : B       |                             | N                       | MDAP/MAIS Code:            |              |             |               |  |  |  |  |  |
|--|-----------------------------|-------------------------|----------------------------|--------------|-------------|---------------|--|--|--|--|--|
| Resource Summary   | Prior Years                 | FY 2016                 | FY 2017                    | FY 2018 Base | FY 2018 OCO | FY 2018 Total |  |  |  |  |  |
| Procurement Quantity (Units in Each)                     | -                           | -                       | -                          | -            | -           | -             |  |  |  |  |  |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 14.84                   | 6 30.623                   | 0.000        | 0.000       | 0.000         |  |  |  |  |  |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                       | -                          | -            | -           | -             |  |  |  |  |  |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 14.84                   | 6 30.623                   | 0.000        | 0.000       | 0.000         |  |  |  |  |  |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                       | -                          | -            | -           | -             |  |  |  |  |  |
| Total Obligation Authority (\$ in Millions)              | -                           | 14.84                   | 6 30.623                   | 0.000        | 0.000       | 0.000         |  |  |  |  |  |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reque | sts are documented elsewhe | re.)         |             |               |  |  |  |  |  |
| Initial Spares (\$ in Millions)                          | -                           | -                       | -                          | -            | -           | -             |  |  |  |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | -                       | -                          | -            | -           | -             |  |  |  |  |  |

|   | P                | Prior Years   |                         |           | FY 2016 FY 2017 |                         |           |               | FY                      | FY 2018 OCO |               |                         | FY 2018 Total |               |                         |           |               |                         |
|---|------------------|---------------|-------------------------|-----------|-----------------|-------------------------|-----------|---------------|-------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements   | Unit Cost        | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)   | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Package Fielding - PackageF   | ielding End Iten | n Cost        |                         |           |                 |                         |           |               |                         |             |               |                         |               |               |                         |           |               |                         |
| Recurring Cost  |                  |               |                         |           |                 |                         |           |               |                         |             |               |                         |               |               |                         |           |               |                         |
| Initial Fielding  | -                | -             | -                       | -         | -               | 0.000                   | -         | -             | 22.443                  | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Site Installation<br>Testing  | -                | -             | -                       | -         | -               | 0.000                   | -         | -             | 0.360                   | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Subtotal: Recurring Cost  | -                | -             | -                       | -         | -               | 0.000                   | -         | -             | 22.803                  | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Subtotal: Package Fielding<br>- PackageFielding End Item<br>Cost                      | -                | -             | -                       | -         | -               | 0.000                   | -         | -             | 22.803                  | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Support - Support End Item C  | Cost             |               |                         |           |                 |                         |           |               |                         |             |               |                         |               |               |                         |           |               |                         |
| Program Management<br>Administration (PMA)  | -                | -             | -                       | -         | -               | 2.629                   | -         | -             | 4.600                   | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Fielding Technical<br>Support   | -                | -             | -                       | -         | -               | 0.340                   | -         | -             | 0.680                   | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Type I Training   | -                | -             | -                       | -         | -               | 0.000                   | -         | -             | 2.540                   | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Subtotal: Support - Support<br>End Item Cost  | -                | -             | -                       | -         | -               | 2.969                   | -         | -             | 7.820                   | -           | -             | 0.000                   | -             | -             | -                       | -         | -             | 0.00                    |
| Support - Counter small Unm   | anned Aerial Sy  | stem JEON (   | ST-0008) Co             | st        |                 |                         |           |               |                         |             |               |                         |               |               |                         |           |               |                         |
| Counter small Unmanned<br>Aerial System JEON<br>(ST-0008)                             | -                | -             | -                       | -         | -               | 11.877                  | -         | -             | -                       | -           | -             | -                       | -             | -             | -                       | -         | -             | -                       |
| Subtotal: Support - Counter<br>small Unmanned Aerial<br>System JEON (ST-0008)<br>Cost | -                | -             | -                       | -         | -               | 11.877                  | -         | -             | -                       | -           | -             | -                       | -             | -             | -                       | -         | -             |                         |

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Item Number / Title [DODIC]:

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4

**P-1 Line Item Number / Title:** 834560 / Air Operations Center (AOC) 10.2

- / Air Operations Center (AOC) 10.2

**ID Code** (A=Service Ready, B=Not Service Ready) : B

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|                             | Prior Years |                   |                         | FY 2016   |                      |                         | FY 2017   |                      |                         | FY 2018 Base |                      |                         | FY 2018 OCO |               |                         | FY 2018 Total |               |                         |
|-----------------------------|-------------|-------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|--------------|----------------------|-------------------------|-------------|---------------|-------------------------|---------------|---------------|-------------------------|
| Cost Elements               | Unit Cost   | <b>Qty</b> (Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Gross/Weapon System<br>Cost | -           | -                 | -                       | -         | -                    | 14.846                  | -         | -                    | 30.623                  | -            | -                    | 0.000                   | -           | -             | 0.000                   | -             | -             | 0.000                   |

#### Remarks:

Differences in site specific setup (due to variations between mission specific needs and differences in site type) will drive differences in site specific requirements (e.g., time required, hardware required and software required). The calculated unit costs are representative but not actual and the total cost will fluctuate between fiscal years.

This makes quantification impossible, as there is no single baseline to produce a quantity against. Per DoD Financial Regulation 7000.14-R, Volume 2B, Chapter 4, Exhibit P-5 Instruction, the quantities in the P-5 are left blank as there is no way to report applicable quantities.

The FY 2017 PB described the Geographic AOC fielding plan with installations of 1/2/3 in FYs 16/17/18. Due to the AOC 10.2 Critical Change, the new fielding plan calls for installations of 4/4 in FYs 20/21, including iterative installs of 10.2.1 and 10.2.2 at the help desk and FTU.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

834880 / Spectrum Relocation Fund

Equip / BSA 4: Spcl Comm-Electronics Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|   | Prior        |                  |                    | FY 2018          | FY 2018         | FY 2018        |                 |                |         |         | То       |        |
|---|--------------|------------------|--------------------|------------------|-----------------|----------------|-----------------|----------------|---------|---------|----------|--------|
| Resource Summary                              | Years        | FY 2016          | FY 2017            | Base             | OCO             | Total          | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)          | -            | -                | -                  | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 19.298           | 0.000              | 0.000            | 0.000           | 0.000          | 0.000           | 0.000          | 0.000   | 0.000   | -        | 19.298 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)        | -            | 19.298           | 0.000              | 0.000            | 0.000           | 0.000          | 0.000           | 0.000          | 0.000   | 0.000   | -        | 19.298 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)   | -            | 19.298           | 0.000              | 0.000            | 0.000           | 0.000          | 0.000           | 0.000          | 0.000   | 0.000   | -        | 19.298 |
| (The following                                | Resource Sum | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget request | s are documente | ed elsewhere.) |         |         |          |        |
| Initial Spares (\$ in Millions)               | -            | -                | -                  | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                  | -                | -               | -              | -               | -              | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                  | -                | -               | -              | -               | -              | -       | -       | -        | -      |

# **Description:**

Funding supports spectrum relocation.

Funding for this exhibit contained in PE 0303267F.

### Justification:

No funding requested for FY18.



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

835060 / Base Information Transpt Infrast (BITI) Wired

Equip / BSA 5: Air Force Communications

Program Elements for Code B Items: N/A

Other Related Program Elements: 0303112F

**Date:** May 2017

Line Item MDAP/MAIS Code: N78

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior         |                  |                    | FY 2018          | FY 2018         | FY 2018         |               |               |         |         | То       |         |
|--|---------------|------------------|--------------------|------------------|-----------------|-----------------|---------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years         | FY 2016          | FY 2017            | Base             | oco             | Total           | FY 2019       | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -             | -                | -                  | -                | -               | -               | -             | -             | -       | -       | 175      | 175     |
| Gross/Weapon System Cost (\$ in Millions)      | 236.772       | 74.621           | 40.043             | 28.159           | 0.000           | 28.159          | 53.892        | 94.920        | 61.468  | 62.578  | 308.067  | 960.520 |
| Less PY Advance Procurement (\$ in Millions)   | -             | -                | -                  | -                | -               | -               | -             | =             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | 236.772       | 74.621           | 40.043             | 28.159           | 0.000           | 28.159          | 53.892        | 94.920        | 61.468  | 62.578  | 308.067  | 960.520 |
| Plus CY Advance Procurement (\$ in Millions)   | -             | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | 236.772       | 74.621           | 40.043             | 28.159           | 0.000           | 28.159          | 53.892        | 94.920        | 61.468  | 62.578  | 308.067  | 960.520 |
| (The following                                 | Resource Sumi | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget requests | are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -             | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -             | -                | -                  | -                | -               | -               | -             | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -             | -                | -                  | -                | -               | -               | -             | -             | -       | -       | 1.760    | 5.489   |

### **Description:**

BASE INFORMATION TRANSPORT INFRASTRUCTURE (BITI), formerly known as INFORMATION TRANSPORT SYSTEM (ITS): BITI delivers the Air Force cyberspace network and integrated infrastructure for 175 fixed Air Force installations (active duty, reserve, and Air National Guard (ANG)) and Geographically Separated Units (GSU) at approved locations. Integrated BITI will have a consolidated cyber capability addressing emerging cyber threats to infrastructure. BITI capabilities encompass all optical systems, digital voice/data/video systems, commercial devices, unified capabilities and wireless capabilities. The end result of a Turnkey project is a high-speed packet switching and circuit transport of critical information among core buildings and mission areas on a base. Additionally, BITI provides a robust and secure wireless infrastructure that incorporates high-availability and multi-tiered network connections at approved facilities requiring remote access. The efforts in this program budget line through its various increments and major projects, coupled with the efforts from the Air Force Network budget line enable the fielding, support and sustainment of standard, enterprise solutions for the entire Air Force Intranet from the individual base communications closets to the Air Force gateways and all the components and systems in-between in cyberspace. As Unified Capabilities (UC) evolves, BITI will respond with expanded bandwidth to provide the necessary throughput.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

BITI will ensure that Air Force operating locations have sufficient infrastructure, bandwidth, and overall network capability to support the current and future communication needs of the Air Force and Joint-Command warfighter via reliable and survivable information transport with sufficient capacity and capability to meet the classified and unclassified data, voice, video, imagery, and telemetry requirements at each installed location

BITI Turnkey: Deploys complete BITI system/sub-system infrastructure/equipment for 175 fixed Air Force installations (active duty, reserve, and ANG) and GSU at approved locations.

BITI Turnkey Modification: Follow on full base internal network modifications for system/sub-system infrastructure. Turnkey Modifications are completed on bases that have already received a Turnkey. As requirements have evolved, base missions have changed and some bases that have already received an earlier Turnkey may not have the fiber needed for the current Base Area Network spec. The Turnkey Modifications expands on the existing outside and inside plant, but not to the extent of an initial Turnkey. The last six (6) Turnkey Modifications started in FY15 and will finish in FY18. After completion of these last Turnkey Modifications, all BITI base work will be Recapitalizations.

BITI Recapitalization: Replaces critical "backbone" infrastructure of network equipment installed as part of Turnkeys on a routine basis for fielded systems for over 175 fixed Air Force installations (active duty, reserve, and Air National Guard (ANG)) and Geographically Separated Units (GSUs) at approved locations.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

835060 / Base Information Transpt Infrast (BITI) Wired

Equip / BSA 5: Air Force Communications

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0303112F

**Date:** May 2017

Line Item MDAP/MAIS Code: N78

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the armed forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PE 0303112F.

| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 74.621  | 40.043  | 23.892          | -              | 23.892           | 43.317  | 85.738  | 61.468  | 46.364  |
| AFNG                   | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | -       | 4.267           | -              | 4.267            | 8.314   | 6.903   | 0.000   | 16.214  |
| AFR                    | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | =       |
|                        | Total Obligation Authority | -       | -       | -               | -              | -                | 2.261   | 2.279   | 0.000   | =       |
| Total:                 | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
| Secondary Distribution | Total Obligation Authority | 74.621  | 40.043  | 28.159          | -              | 28.159           | 53.892  | 94.920  | 61.468  | 62.578  |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

835060 / Base Information Transpt Infrast (BITI) Wired

Equip / BSA 5: Air Force Communications

Program Elements for Code B Items: N/A

Other Related Program Elements: 0303112F

Line Item MDAP/MAIS Code: N78

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule                            |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                                       | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) I (\$ M) |
| P-5             | 0303112F ITS                                 |             | Α        |                       | - / 236.772                              | - / 74.621                               | - /40.043                                | - / -                                    | - / -                                    | - / -                                    |
| P-3a            | 1 / BITI Mod/Recaps (Capability Improvement) |             |          |                       | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 28.159                               | - / 0.000                                | - / 28.159                               |
| P-40            | Total Gross/Weapon System Cost               |             |          |                       | - / 236.772                              | - / 74.621                               | - / 40.043                               | - / 28.159                               | - / 0.000                                | - / 28.159                               |
|                 | Exhibits Schedule                            |             |          |                       | FY 2019                                  | FY 2020                                  | FY 2021                                  | FY 2022                                  | To Complete                              | Total                                    |
|                 |  |             |          |                       |  |  |  |  |  |  |
| Exhibit<br>Type | Title*                                       | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) I (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) I (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M) |
|                 | Title* 0303112F ITS                          | Subexhibits | ID       | MAIS                  |  |  |  |  |  |  |
| Type            |  | Subexhibits | ID       | MAIS                  | (Each) I (\$ M)                          |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

BITI: FY18 funding includes, but is not limited to, implementation and upgrades to broadband, fiber-optic digital information transport networks to provide mission-critical information transfer capabilities at fixed Air Force bases (Active Duty, Air Force Reserve, and Air National Guard) and selected geographically separated unit locations. Procurement efforts include, but are not limited, site surveys, installations, and interim contractor support (ICS).

BITI Turnkey Modification: FY18 deliveries will modify the complete system infrastructure/equipment on bases that have already received a Turnkey. The last six (6) installations started taking place in FY15 and will finish in FY18.

BITI Recapitalization: FY18 replaces BITI Turnkey fielded systems for 175 fixed Air Force installations.

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Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 5

Date: May 2017

Item Number / Title [DODIC]:
- / 0303112F ITS

| ID Code (A=Service Ready, B=Not Service Ready): A |                                | M                         | DAP/MAIS Code:           |              |             |               |
|---|--------------------------------|---------------------------|--------------------------|--------------|-------------|---------------|
| Resource Summary                                  | Prior Years                    | FY 2016                   | FY 2017                  | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)              | -                              | -                         | -                        | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)         | 236.772                        | 74.621                    | 40.043                   | -            | -           | -             |
| Less PY Advance Procurement (\$ in Millions)      | -                              | -                         | -                        | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)            | 236.772                        | 74.621                    | 40.043                   | -            | -           | -             |
| Plus CY Advance Procurement (\$ in Millions)      | -                              | -                         | -                        | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)       | 236.772                        | 74.621                    | 40.043                   | -            | -           | -             |
| (The following Resource Summary rows are for info | mational purposes only. The co | rresponding budget reques | s are documented elsewhe | re.)         |             |               |
| Initial Spares (\$ in Millions)                   | -                              | -                         | -                        | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)    | -                              | -                         | -                        | -            | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | P           | rior Years    | ;                       |           | FY 2016              |                         |           | FY 2017              |                         | F۱        | / 2018 Ba     | se                      | F۱        | 2018 OC       | 0                       | FY        | 2018 Tot      | :al                     |
|--|-------------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements                                    | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - Hardware End Ite                      | m Cost Cost | '             |                         |           | '                    |                         |           |                      |                         |           |               |                         | '         |               |                         | '         |               |                         |
| Recurring Cost                                   |             |               |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |
| BITI Turnkey Projects - AD Site Survey           | 0.687       | 21            | 14.435                  | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Turnkey Projects - AD Installation          | 4.464       | 16            | 71.429                  | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Turnkey Projects - Reserve Site Survey      | 0.381       | 5             | 1.903                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Turnkey Projects - Reserve Installation     | 2.217       | 4             | 8.867                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Turnkey<br>Modernization AD Site<br>Survey  | 2.698       | 1             | 2.698                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Turnkey<br>Modernization AD<br>Installation | 6.380       | 5             | 31.901                  | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Recapitalization<br>AD                      | 1.781       | 4             | 7.122                   | 0.585     | 40                   | 23.419                  | 0.899     | 2                    | 1.798                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Recapitalization Reserve                    | -           | -             | 0.255                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Enterprise<br>Recapitalization              | -           | -             | 42.094                  | -         | -                    | 35.528                  | -         | -                    | 2.379                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| AFGSC Telephone<br>Requirement                   | -           | -             | 10.000                  | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| BITI Recapitalization ANG                        | -           | -             | -                       | -         | -                    | -                       | 0.700     | 30                   | 20.992                  | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |

LI 835060 - Base Information Transpt Infrast (BITI) ... Air Force

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P-1 Line #40

Exhibit P-5, Cost Analysis: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 5

P-1 Line Item Number / Title:
835060 / Base Information Transpt Infrast (BITI) Wired
- / 0303112F ITS

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | F         | Prior Years   | S                       |           | FY 2016       |                         |           | FY 2017       |                         | F         | / 2018 Ba     | se                      | FY        | / 2018 OC            | 0                       | FY        | / 2018 Tot           | al                      |
|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|
| Cost Elements  | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Subtotal: Recurring Cost                                   | -         | -             | 190.704                 | -         | -             | 58.947                  | -         | -             | 25.169                  | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       |
| Subtotal: Hardware -<br>Hardware End Item Cost<br>Cost     | -         | -             | 190.704                 | -         | -             | 58.947                  | -         | -             | 25.169                  | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       |
| Support - Support End Item C                               | Cost Cost |               |                         |           | ,             |                         |           |               | ,                       |           |               | ,                       | •         |                      | ,                       |           |                      |                         |
| BITI Direct Mission<br>Support (DMS)                       | -         | -             | 27.093                  | -         | -             | 9.448                   | -         | -             | 8.811                   | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       |
| BITI Program Support<br>Costs (PSC) Contractor<br>Services | -         | -             | 17.192                  | -         | -             | 5.843                   | -         | -             | 5.710                   | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       |
| BITI Other PSC<br>Government Costs                         | -         | -             | 1.783                   | -         | -             | 0.383                   | -         | -             | 0.353                   | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       |
| Subtotal: Support - Support<br>End Item Cost Cost          | -         | -             | 46.068                  | -         | -             | 15.674                  | -         | -             | 14.874                  | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       |
| Gross/Weapon System Cost                                   | -         | -             | 236.772                 | -         | -             | 74.621                  | -         | -             | 40.043                  | -         | -             | -                       | -         | -                    | -                       | -         | -                    | -                       |

#### Remarks:

Unit cost has significant variability due to size and complexity of bases/projects. A quantity is defined as a base location site survey or install and is projected based on mission requirements and funding availability.

Manpower (consisting of DMS & PSC) is combined Operations & Support and Acquisition cost.

PROGRAM SUPPORT COSTS (PSC) formally known as PROGRAM MANAGEMENT ADMINISTRATION (PMA): PSC BITI program supports the operation of the program office in its management and oversight role. PSC supports the BITI and the Base Information Infrastructure (BII) Program with engineering and technical support, as well as, support activities for the program.

DIRECT MISSION SUPPORT (DMS): DMS for BITI includes all support associated with equipment installation, engineering technical orders, sustainment engineering, and implementation. This includes the initial bed down and operability testing, technical interchange meetings, interim contractor support and events associated with fielding both hardware and software products, and maintaining configuration control of fielded products.

Funding for Turnkey projects end in 2015, all other funding line items continue through 2027. 2016 and beyond are solely recapitalizations.

NOTE: Previous modification efforts (FY16 & FY17) were reported on the P-5 exhibit. Direction in January 2016 was to begin reporting the modification effort for BITI on a P-3a exhibit starting for the FY18 effort and beyond.

| Secondar | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|----------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF       | Quantity                   | -       | -       | -               | -              | -                |
|          | Total Obligation Authority | 74.621  | 40.043  | -               | -              | -                |
| Total:   | Quantity                   | -       | -       | -               | -              | -                |

LI 835060 - Base Information Transpt Infrast (BITI) ... Air Force

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P-1 Line #40

| Secondary Distribution FY 2016 FY 2017 Base OCO                 | :                |
|---|------------------|
| Secondary Distribution FY 2016 FY 2017 Base OCO                 |                  |
| Recondary Distribution Total Obligation Authority 74.921 40.043 | FY 2018<br>Total |
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Exhibit P-3a, Individual Modification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 5

P-1 Line Item Number / Title:
835060 / Base Information Transpt Infrast (BITI) Wired

1 / BITI Mod/Recaps

| ID Code (A=Service Ready, B=Not Service Ready) | :              |                  |                   |                  |                  | MDAP/MAI         | IS Code:        |                |         |         |                |       |
|--|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|-------|
| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total |
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Gross/Weapon System Cost (\$ in Millions)      | 0.000          | 0.000            | 0.000             | 28.159           | 0.000            | 28.159           | -               | -              | -       | -       | -              | -     |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Net Procurement (P-1) (\$ in Millions)         | 0.000          | 0.000            | 0.000             | 28.159           | 0.000            | 28.159           | -               | -              | -       | -       | -              | -     |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Total Obligation Authority (\$ in Millions)    | 0.000          | 0.000            | 0.000             | 28.159           | 0.000            | 28.159           | -               | -              | -       | -       | -              | -     |
| (The following                                 | Resource Sum   | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) | i       |         |                |       |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -     |

### **Description:**

BITI Turnkey Modification: FY18 deliveries will modify the complete system infrastructure/equipment on bases that have already received a Turnkey. Modernizations are responding to COTS obsolescence, address changes in bandwidth requirements, and re-scaling of the Base Area Network backbone equipment to support the base until the next mod/recap (5 year cycle). The last 6 installations started taking place in FY15 and will finish in FY18.

BITI Recapitalization: FY18 replaces BITI Turnkey fielded systems for 175 fixed Air Force installations.

NOTE: Previous modification efforts (FY16 & FY17) were reported on the P-5 exhibit. Direction in January 2016 was to begin reporting the modification effort for BITI on a P-3a exhibit starting for the FY18 effort and beyond.

Milestone/Development Status

#### Sustainment

| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | -       | 23.892          | -              | 23.892           | -       | -       | -       | -       |
| AFNG                   | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | -       | 4.267           | -              | 4.267            | -       | -       | -       | -       |
| Total:                 | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
| Secondary Distribution | Total Obligation Authority | 0.000   | 0.000   | 28.159          | 0.000          | 28.159           | -       | =       | -       | =       |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force |  | Date: May 2017                                   |
|--|--|--|
|  | P-1 Line Item Number / Title:<br>835060 / Base Information Transpt Infrast (BITI) Wired  | Modification Number / Title: 1 / BITI Mod/Recaps |
|  | The state of the s | 2  |

| 3080F / 03 / 5                                    |                                   |                                   | 0330007                           | base illioili                     | iation man                        | spt mirast                        | (DIII) WIIE                       | <del>t</del> u                    | I I DITTIVI                       | od/Recaps                         |                                   |                                |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|
| ID Code (A=Service Ready, B=Not Service Ready):   |                                   |                                   |                                   |                                   | MD                                | AP/MAIS Co                        | de:                               |                                   |                                   |                                   |                                   |                                |
| Models of Systems Affected: BITI                  |                                   | Modifi                            | ication Typ                       | e: Capabil                        | ity Improve                       | ement                             | Re                                | lated RDT                         | <b>&amp;E PEs</b> : 0             | 303112F                           |                                   |                                |
|   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                          |
| Financial Plan                                    | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ |
| Procurement                                       |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                |
| Modification Item 1 of 1: BITI Recapitalization   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                |
| B Kits  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                |
| Recurring   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                |
| BITI Recapitalization: EQUIPMENT Group B (Active) | - 1 -                             | - 1 -                             | - / -                             | 15 / 9.304                        | - 1 -                             | 15 / 9.304                        | - 1 -                             | - / -                             | - 1 -                             | - / -                             | - / -                             | - 1                            |
| BITI Recapitalization: EQUIPMENT Group B (Guard)  | - 1 -                             | - 1 -                             | - 1 -                             | 11 / 3.551                        | - 1 -                             | 11 / 3.551                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                            |
| Subtotal: Recurring                               | - / -                             | - / -                             | - / -                             | - /12.855                         | - / -                             | - /12.855                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                            |
| Subtotal: BITI Recapitalization                   | - / -                             | - / -                             | - / -                             | - /12.855                         | - / -                             | - /12.855                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                            |
| Subtotal: Procurement, All Modification Items     | - / -                             | - / -                             | - / -                             | - /12.855                         | - / -                             | - /12.855                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                            |
| Support (All Modification Items)                  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                |
| GROUP B: TOTAL NONRECURRING                       | - 1 -                             | - / -                             | - 1 -                             | - / 0.335                         | - 1 -                             | - / 0.335                         | - 1 -                             | - / -                             | - 1 -                             | - / -                             | - 1 -                             | - 1                            |
| PMA - Other Gov't Costs                           | - 1 -                             | - 1 -                             | - 1 -                             | - / 0.392                         | - 1 -                             | - / 0.392                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                            |
| A&AS  | - 1 -                             | - 1 -                             | - 1 -                             | - /7.900                          | - 1 -                             | - 17.900                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                          |
| PMA - Contractor Services                         | - 1 -                             | - 1 -                             | - 1 -                             | - /4.085                          | - 1 -                             | - /4.085                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                          |
| Subtotal: Support                                 | - / -                             | - / -                             | - / -                             | - /12.712                         | - / -                             | - /12.712                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                            |
| Installation                                      |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                |
| Modification Item 1 of 1: BITI Recapitalization   | - 1 -                             | - 1 -                             | - 1 -                             | 26 / 2.592                        | - 1 -                             | 26 / 2.592                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                            |
| Subtotal: Installation                            | - / -                             | - / -                             | - / -                             | 26 / 2.592                        | - / -                             | 26 / 2.592                        | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                            |
| Total   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                |
| Total Cost (Procurement + Support + Installation) | 0.000                             | 0.000                             | 0.000                             | 28.159                            | 0.000                             | 28.159                            | -                                 | -                                 | -                                 | -                                 | -                                 |                                |

P-1 Line #40

| Exhibit P-3a, Indi                  | vidual Modification: F     | Y 2018 Air Force |  |  |                | <b>Date:</b> May 2017                            |         |  |  |
|-------------------------------------|----------------------------|------------------|--|--|----------------|--|---------|--|--|
| Appropriation / B<br>3080F / 03 / 5 | udget Activity / Budge     | et Sub Activity: | P-1 Line Item Nu<br>835060 / Base Info | mber / Title:<br>ormation Transpt Infras | t (BITI) Wired | Modification Number / Title: 1 / BITI Mod/Recaps |         |  |  |
| ID Code (A=Service Read             | ly, B=Not Service Ready):  |                  |  | MDAP/MAIS C                              |                |  |         |  |  |
| Modification Item 1 of              | f 1: BITI Recapitalization |                  |  | 1  |                |  |         |  |  |
| Manufacturer Informa                | ition                      |                  |  |  |                |  |         |  |  |
| Manufacturer Name: Ti               | BD/Multiple                |                  |  | Manufacturer Location: 1                 | ГВD            |  |         |  |  |
| Administrative Leadtime             | e (in Months): 3           |                  |  | Production Leadtime (in                  | Months): 9     |  |         |  |  |
| Dates                               | FY 2016                    | FY 2017          | FY 2018                                | FY 2019                                  | FY 2020        | FY 2021  | FY 2022 |  |  |
| Contract Dates                      |                            |                  | Jan 2018                               |  |                |  |         |  |  |
| Delivery Dates                      |                            |                  | Oct 2018                               |  |                |  |         |  |  |

#### Installation Information

Method of Implementation: Contractor Facility

|                   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                             |
|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Installation Cost | Qty (Each) I<br>Total Cost (\$ M) |
| Prior Years       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2016           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2017           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2018           | - 1 -                             | - 1 -                             | - 1 -                             | 26 / 2.592                        | - 1 -                             | 26 / 2.592                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2019           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2020           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2021           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2022           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| To Complete       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| Total             | - 1 -                             | - 1 -                             | - 1 -                             | 26 / 2.592                        | - 1 -                             | 26 / 2.592                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |

### Installation Schedule

|     | FY 2016         FY 2017           PYS         Q1         Q2         Q3         Q4         Q1         Q2         Q3         Q4 |    |    |    |    | FY 2018 FY 2019 |    |    |    |    | FY 2020 |    |    | FY 2021 |    |    |    | FY 2022 |    |    |    |    |    |    |    |    |    |    |    |    |     |
|-----|---|----|----|----|----|-----------------|----|----|----|----|---------|----|----|---------|----|----|----|---------|----|----|----|----|----|----|----|----|----|----|----|----|-----|
|     | PYS   | Q1 | Q2 | Q3 | Q4 | Q1              | Q2 | Q3 | Q4 | Q1 | Q2      | Q3 | Q4 | Q1      | Q2 | Q3 | Q4 | Q1      | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | TC | Tot |
| In  | 0   | -  | -  | -  | -  | -               | -  | -  | -  | -  | 26      | -  | -  | -       | 37 | -  | -  | -       | 32 | -  | -  | -  | 35 | -  | -  | -  | 45 | -  | -  | 0  | 175 |
| Out | 0   | -  | -  | -  | -  | -               | -  | -  | -  | -  | -       | -  | -  | 6       | 6  | 7  | 7  | 9       | 9  | 9  | 10 | 8  | 8  | 8  | 8  | 9  | 9  | 9  | 8  | 45 | 175 |



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

835080 / AFNET

Equip / BSA 5: Air Force Communications

Program Elements for Code B Items: N/A

Other Related Program Elements: 0208088F, 0303089F, 0303112F

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Posource Summary                               | Prior<br>Years  | FY 2016          | FY 2017            | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total  | FY 2019                | FY 2020                | FY 2021                | FY 2022                | To<br>Complete | Total                    |
|--|-----------------|------------------|--------------------|------------------|------------------|-------------------|------------------------|------------------------|------------------------|------------------------|----------------|--------------------------|
| Resource Summary                               | Tears           | F1 2016          | F1 2017            | Dase             | 000              | TOLAT             | F1 2019                | F1 2020                | F1 2021                | F1 2022                | Complete       | IOlai                    |
| Procurement Quantity (Units in Each)           | -               | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -              | -                        |
| Gross/Weapon System Cost (\$ in Millions)      | 90.487          | 98.143           | 146.897            | 160.820          | 0.000            | 160.820           | 155.659 <sup>(a)</sup> | 115.029 <sup>(b)</sup> | 115.136 <sup>(c)</sup> | 126.129 <sup>(d)</sup> | -              | 1,008.300 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -               | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -              | -                        |
| Net Procurement (P-1) (\$ in Millions)         | 90.487          | 98.143           | 146.897            | 160.820          | 0.000            | 160.820           | 155.659                | 115.029                | 115.136                | 126.129                | -              | 1,008.300                |
| Plus CY Advance Procurement (\$ in Millions)   | -               | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -              | -                        |
| Total Obligation Authority (\$ in Millions)    | 90.487          | 98.143           | 146.897            | 160.820          | 0.000            | 160.820           | 155.659                | 115.029                | 115.136                | 126.129                | -              | 1,008.300                |
| (The following                                 | g Resource Sumi | mary rows are fo | or informational p | urposes only. Th | ne corresponding | g budget request: | s are documente        | ed elsewhere.)         |                        |                        | ĺ              |                          |
| Initial Spares (\$ in Millions)                | -               | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -              | -                        |
| Flyaway Unit Cost (\$ in Millions)             | -               | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -              | -                        |
| Gross/Weapon System Unit Cost (\$ in Millions) | -               | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -              | -                        |

### **Description:**

AFNet Weapon Systems in this exhibit are defined as follows: (1) Air Force Cyberspace Defense (ACD),(2) Cyberspace Security and Control System (CSCS), and (3) Air Force Intranet Control (AFINC). Funding for the ACD weapon system are allocated in PE 0207425F & 0208088F. Funding for CSCS & AFINC weapon systems are allocated in PE 0303089F.

AFNet provides Commercial Off-The-Shelf (COTS) solutions to implement, deliver and upgrade installation processing nodes and boundaries, AF Gateways, Information Management Suite, enterprise network security, network situational awareness and C2 capabilities, and allows for the interface with and assured movement of information from terrestrial, air and space-based networks, thus enabling Air Force Information Operations (AFINOps). All funds used for AFNet Systems support the continued establishment and transformation of the AFINOps construct toward the standards and specifications of the DoD Joint Information Environment (JIE). The procurement efforts in this program budget line includes, but are not limited to, equipment purchase, engineering/integration, certification and accreditation, deployment, testing, training equipment/systems, associated training and interim contractor support. Procurements implement technology and capabilities within the AFNet in accordance with the DoD IT Roadmap, AF Information Dominance Flight Plan, AF Cyber blueprint and the AF Network Action Plan. All activities may incorporate support to other program elements across the Air Force Information Enterprise in accordance with SAF/A6 CIO direction, the Federal Data Center Consolidation Initiative (FDCCI) and the Joint Information Environment (JIE) strategy.

PE 0207425F, AFNET OPS AND COMMAND COMM

This PE was an FY16 single year PE placeholder specifically set up to execute AFNet requirements until transition to Weapon System PEs 0208088F & 0303089F in FY17.

PE 0208088F, AIR FORCE CYBERSPACE DEFENSE (ACD) WEAPON SYSTEM

Procures and installs active defensive counter cyberspace operations and situational awareness capabilities in a Defensive Cyberspace Operations role to achieve cyberspace superiority for assigned missions. ACD procurements allow for 24/7/365 monitoring and defense of US Air Force and US Central Command, and Third Party SIPR/NIPR computer networks against hostile attacks as well as intrusion detection, network traffic analysis, network forensics analysis, countermeasure development and execution, and incident response. ACD provides indication and warning, correlation, logging, vulnerability remediation, assessment, process management, blocking, vulnerability identification, investigation and containment. In addition, the ACD provides CSSP (Cyber Security Service Provider) service system upgrades to the AFNet and several third party entities including Joint Strike Fighter, USTRANSCOM, and others. Efforts include, but are not limited to: Host Based Security System upgrades, Next Generation Firewall and Full Packet Capture and Data Analytics Enterprise.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

835080 / AFNET

Equip / BSA 5: Air Force Communications

 $\textbf{ID Code} \,\, (\mathsf{A}\text{=}\mathsf{Service} \,\, \mathsf{Ready}, \, \mathsf{B}\text{=}\mathsf{Not} \,\, \mathsf{Service} \,\, \mathsf{Ready}) \textbf{:} \,\, A$ 

Program Elements for Code B Items: N/A

Other Related Program Elements: 0208088F, 0303089F, 0303112F

Line Item MDAP/MAIS Code: N/A

PE 0301400F, SPACE SUPERIORITY INTELLIGENCE (SSI)

This PE executes requirements for SSI. Funds may be used for other AFNet requirements if required.

No FY18 funds are requested.

Cyber Situational Awareness Weapon System (CSAWS): Procures and installs equipment to connect 24th AF unfiltered traffic flow to 25th AF for PAD (Processing, Analysis and Distribution) enabling the first AF Cyber ISR collection and processing capability. Provides ISR based adversary cyber activity Indications and Warnings (I&W) for Situational Awareness (SA). The effort procures a dedicated AF Cyber ISR platform (Remote Data Collector and Remote Data Processor) array that connects to the highest level at the network gateway locations to obtain unfiltered net-flow and packet capture (PCAP). This data is moved via long-haul to the 25th AF El Dorado PAD systems for analysis. The fusion of all source intelligence and net flow analysis provides actionable CTA (Cyber Threat Advisories) reports to cyber operators for the appropriate and proactive actions.

PE 0303089F, AIR FORCE INTRANET CONTROL / CYBERSPACE SECURITY AND CONTROL SYSTEM (AFINC/CSCS) WEAPON SYSTEM

This PE executes requirements for both AFINC and CSCS weapon systems. Funds may be used for other AFNet requirements if required.

(1) AFINC: Procures and installs equipment for network operations, network defense and overall management of the AF NIPRNet Gateways and the Information Management Suite as well as the Air Force discrete requirements associated with the Joint Regional Security Stacks (JRSS). Efforts include, but are not limited to:

AFNet NIPR Gateways (MAC-1 system) and SIPR Gateways (GW), which deliver critical network defense capabilities for the AF enterprise with over 800k users directly supporting flying, maintenance, space and cyber operations across the full range of military operations. GWs prevent and detect unauthorized network infiltration attempts, automatically initiating network defense countermeasures eliminating adversary ability to gain access to the enterprise which would diminish the AF information defense posture. GWs directly support cyber operations worldwide enabling war-fighting missions. With the migration of all Air Force installations to JRSS the GWs will sunset. Funding enables the removal of systems dependent on the GWs and subsequent decommissioning of the GWS. Includes recapitalization of the Information Management Suite (IMS), which provides the Air force with a secure, real-time centralized Out of Band Management of the network management infrastructure for the AFINC, ACD, and CSCS Weapon systems and unifies the management/defense of AF networks and assets, as well as procures equipment upgrades that directly relate to the migration of AF traffic and technology transition from the AFNet NIPR Gateways to the Joint Regional Security Stacks (JRSS).

(2) CSCS: Procures and installs capabilities contributing to cyber mission assurance, including proactive defense and persistent network operations for the Air Force and the Air Force-provisioned portions of the DoD Information Network (DoDIN) and the Air Force Information Network (AFIN). CSCS modifications support the following activities: fault resolution activities to maintain operational capabilities; lead-in coordinating activities at base-level Network Control Centers for necessary network security actions; monitoring of AF network services; managing of boundary protection devices and the Air Force network infrastructure; and continuous network situational awareness. Efforts include, but are not limited to: Data Center Consolidation and migration to the Joint Information Environment (JIE); upgrade to the Core Services and the Air Force Vulnerability Management (AFVM) and Network Management.

FY18 will procure upgrades for CSCS and AFINC based on 1067 requests. CSCS includes, but is not limited to, Vulnerability Management, Area Processing Center and Regional Data Center Consolidations, and Installation Processing Nodes ACAS upgrades. AFINC includes, but is not limited to, Gateway e-mail security/DNS upgrades.

PE 0303112F, AFNET (Formally titled: AIR FORCE COMMUNICATION (AIRCOM))

In FY17, funding in this PE was reallocated to the CSCS, ACD, and AFINC weapon system PEs to fund their block mods, as part of the transition of AFNet to the three weapon systems.

PE 0303228F, AFNET/JOINT INFORMATON ENVIROMENT (JIE)

This PE executes requirements for JIE. Funds may be used for other AFNet requirements.

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|--|--|--|--|
| Exhibit P-40, Budget Line Item Justification   | ı: FY 2018 Air Force   |  | <b>Date:</b> May 2017  |
| Appropriation / Budget Activity / Budget Su<br>3080F: Other Procurement, Air Force / BA 03:<br>Equip / BSA 5: Air Force Communications |  | <b>P-1 Line Item N</b> 835080 / AFNET  |  |
| ID Code (A=Service Ready, B=Not Service Ready): A  | Program Elements for Code B It   | ems: N/A   | Other Related Program Elements: 0208088F, 0303089F, 0303112F   |
| Line Item MDAP/MAIS Code: N/A  |  |  |  |
| Stacks (JRSS), Network Consolidation, Security, Enterpri<br>Enterprise Operations Centers, etc.). Much of the Increme                  | ise Services, Application Rationalization, Enterp<br>ent 1 effort focuses on delivering and implement<br>itial set of enterprise services, and establishing t<br>ively. JIE funding may be used to maintain the co | rise Licensing, Mobilitiing reference and solution and solutione governance procesurrent architecture of the solution in the s | Iress diverse key categories that include but are not limited to: Joint Regional Security ty Service, Cloud Computing, and Installation types (e.g., Core Data Centers, lution architectures and artifacts, developing TTPs needed to operate JIE capabilities esses critical to JIE management. Similar implementation tasks will be established for the AFNET while JIE implementation is ongoing. |
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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement. Air Force / BA 03: Electronics and Telecommunications

835080 / AFNET

Equip / BSA 5: Air Force Communications

Program Elements for Code B Items: N/A

Other Related Program Elements: 0208088F, 0303089F, 0303112F

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Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 |   |             |          |                       | ,  |  | 7  | ,  |  |  |
|-----------------|---|-------------|----------|-----------------------|--|--|--|--|--|--|
|                 | Exhibits Schedule   |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
| Exhibit<br>Type | Title*  | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) I (\$ M) |
| P-40a           | AF Network Ops and Command Comms                          |             |          |                       | - / 0.000                                | - /49.049                                | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-3a            | 1 / ACD WS 0208088F (Reliability & Maintainability)       |             |          |                       | - / -                                    | - / 0.000                                | - /7.736                                 | - / 30.914                               | - / 0.000                                | - / 30.914                               |
| P-5             | Space Superiority Intelligence                            |             | Α        |                       | - / 0.000                                | 1 / 2.337                                | 1 / 5.110                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-3a            | 1 / AFINC/CSCS WS 0303089 (Reliability & Maintainability) |             |          |                       | - / -                                    | - / 17.309                               | - / 105.586                              | - / 129.906                              | - / 0.000                                | - / 129.906                              |
| P-40a           | Air Force Communications (AIRCOM)                         |             |          |                       | - / 90.487                               | - / 29.448                               | - / 28.465                               | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40            | Total Gross/Weapon System Cost                            |             |          |                       | - / 90.487                               | - / 98.143                               | - / 146.897                              | - / 160.820                              | - / 0.000                                | - /160.820                               |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 AFNET (835080) funding provides for, but is not limited to, procurement & modification of the installed and supported critical classified and unclassified information equipment capabilities for the Air Force Network (AFNet) Systems and modification efforts within all three major weapon system components (ACD, AFINC & CSCS).

PE 0207425F, AF NETWORK OPS AND COMMAND COMM

Procured and installed AFNet/Weapon System requirements in FY16. No budget year (FY18) funding requested.

PE 0208088F, AF DEFENSIVE CYBERSPACE OPERATIONS (ACD) WEAPON SYSTEM

Procures and installs active defensive counter cyberspace systems, situational awareness capabilities, and comprehensive malware forensics analysis.

PE 0301400F, SPACE SUPERIORITY INTELLIGENCE

Cyber Situational Awareness Weapon System (CSAWS): Procures and installs equipment to connect 24th AF unfiltered traffic flow to 25th AF for PAD (Processing, Analysis and Distribution) enabling the first AF Cyber ISR collection and processing capability. Provides ISR based adversary cyber activity Indications and Warnings (I&W) for Situational Awareness (SA).

PE 0303089F, CYBERSPACE OPERATIONS SYSTEMS

- (1) AFINC: Procures and installs equipment for network operations, network defense and overall management of the AF NIPRNet Gateways as well as the Air Force discrete requirements associated with the Joint Regional Security Stacks (JRSS).
- (2) CSCS: Procures and installs capabilities contributing to cyber mission assurance, including proactive defense and persistent network operations for the Air Force and the Air Force-provisioned portions of the DoD Information Network (DoDIN) and the Air Force Information Network (AFIN).

PE 0303112F, AIR FORCE COMMUNICATION (AIRCOM)

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|---|---|---------------------------------------|--|
| Exhibit P-40, Budget Line Item Justification  |   |                                       | <b>Date:</b> May 2017  |
| Appropriation / Budget Activity / Budget So<br>3080F: Other Procurement, Air Force / BA 03<br>Equip / BSA 5: Air Force Communications |   | <b>P-1 Line Item N</b> 835080 / AFNET |  |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It                | ems: N/A                              | Other Related Program Elements: 0208088F, 0303089F, 0303112F                 |
| Line Item MDAP/MAIS Code: N/A   |   |                                       |  |
| In FY17, funding in this PE was reallocated to the CSCS   | , ACD, and AFINC weapon system PEs to fund t  | heir block mods. No k                 | oudget year (FY18) funding requested.  |
| Efforts with funding starting in FY 2019 through FY 2 follows:  | 2022 are summarized on the P-40. Not all deta | ils of this funding ar                | e included in this P-40 exhibit set. A summary of the excepted details is as |
|   |   | <sup>(a)</sup> FY 2019 Cost D         | elta: 155.659 million  |
|   |   |                                       | elta: 115.029 million  |
|   |   | (c) FY 2021 Cost D                    | elta: 115.136 million  |
|   |   |                                       | elta: 126.129 million  |
|   |   |                                       | elta: 1,008.300 million  |
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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 5

P-1 Line Item Number / Title:

835080 / AFNET

Aggregated Modification Items Title:

AF Network Ops and Command Comms

| MDA  |    | P                     | Prior Years | S                    |                         | FY 2016   |               |                         | FY 2017   |               | FY                      | ′ 2018 Bas | se                   | F                       | Y 2018 OC | 0             | FY                      | / 2018 Tot | tal           |                         |
|--|----|-----------------------|-------------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|----------------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|
| Item Number / Title  | ID | MDAP/<br>MAIS<br>Code | Unit Cost   | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| AFNET Ops and<br>Command Comms /<br>AFNET Ops and<br>Command Comms |    |                       | -           | -                    | -                       | -         | -             | 49.049                  | -         | -             | -                       | -          | -                    | -                       | -         | -             | -                       | -          | -             | -                       |
| Total  |    |                       | -           | -                    | 0.000                   | -         | -             | 49.049                  | -         | -             | 0.000                   | -          | •                    | 0.000                   | -         | -             | 0.000                   | -          | -             | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### **Modification Information:**

| Item Number / Title  | Models of Systems Affected | Modification Type             |
|--|----------------------------|-------------------------------|
| AFNET Ops and Command Comms /<br>AFNET Ops and Command Comms | ACD-AFINC-CSCS             | Reliability & Maintainability |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force              |   | Date: May 2017                                      |
|---|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5 | P-1 Line Item Number / Title:<br>835080 / AFNET | Modification Number / Title:<br>1 / ACD WS 0208088F |
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|---|---------------------------------|------------------------|-----------------------------|--------------|------------------|---------------|--|--|--|--|--|
| ID Code (A=Service Ready, B=Not Service Ready):     |                                 |                        | MDAP/MAIS Code:             |              |                  |               |  |  |  |  |  |
| Resource Summary                                    | Prior Years                     | FY 2016                | FY 2017                     | FY 2018 Base | FY 2018 OCO      | FY 2018 Total |  |  |  |  |  |
| Procurement Quantity (Units in Each)                | -                               |                        |                             | -            | -                | -             |  |  |  |  |  |
| Gross/Weapon System Cost (\$ in Millions)           | -                               | 0.0                    | 00 7.736                    | 30.914       | 0.000            | 30.914        |  |  |  |  |  |
| Less PY Advance Procurement (\$ in Millions)        | -                               |                        |                             | -            | -                | -             |  |  |  |  |  |
| Net Procurement (P-1) (\$ in Millions)              | -                               | 0.0                    | 00 7.736                    | 30.914       | 0.000            | 30.914        |  |  |  |  |  |
| Plus CY Advance Procurement (\$ in Millions)        | -                               |                        |                             | -            | -                | -             |  |  |  |  |  |
| Total Obligation Authority (\$ in Millions)         | -                               | 0.0                    | 7.736                       | 30.914       | 0.000            | 30.914        |  |  |  |  |  |
| (The following Resource Summary rows are for inform | national purposes only. The cor | responding budget requ | ests are documented elsewhe | ere.)        |                  |               |  |  |  |  |  |
| Initial Spares (\$ in Millions)                     | -                               |                        |                             | -            | -                | -             |  |  |  |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions)      | -                               |                        |                             | -            | -                | -             |  |  |  |  |  |
|   |                                 |                        |                             | 1            |                  |               |  |  |  |  |  |

### **Description:**

PE 0208088F, AF DEFENSIVE CYBERSPACE OPERATIONS (ACD) WEAPON SYSTEM

Requirements for ACD have been funded previously in 0303112F and 0207425F as part of the AFNet 835080 procurement exhibit. Funds may be used for other AFNet requirements if required.

Procures and installs active defensive counter cyberspace operations and situational awareness capabilities in a NetD role to achieve cyberspace superiority for assigned missions. ACD procurements allow for 24/7/365 monitoring and defense of US Air Force and US Central Command, and Third Party SIPR/NIPR computer networks against hostile attacks as well as intrusion detection, network traffic analysis, network forensics analysis, countermeasure development and execution, and incident response. ACD provides indication and warning, correlation, logging, vulnerability remediation, assessment, process management, blocking, vulnerability identification, investigation and containment. In addition, the ACD provides CNDSP (Computer Network Defense Service Provider) service systems upgrades to the AFNet and several third party entities including Joint Strike Fighter, USTRANSCOM, and others. Efforts include, but are not limited to: Host Based Security System upgrades, Next Generation Firewall and Full Packet Capture and Data Analytics Enterprise.

FY18 funds will procure updates via 1067s requests for ACD which includes, but is not limited to, Host Based Security System upgrades, Data Analytics, and hardware/software upgrades to move towards the Joint Information Environment (JIE).

Milestone/Development Status

Sustainment

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| Exhibit P-3a, Individual Modification: F                | Y 2018 Air Force                  |                                     |                                   |   | <b>Date:</b> May 2017             |                                   |  |
|---|-----------------------------------|-------------------------------------|-----------------------------------|---|-----------------------------------|-----------------------------------|--|
| Appropriation / Budget Activity / Budget 3080F / 03 / 5 | et Sub Activity:                  | P-1 Line Item Number 835080 / AFNET | er / Title:                       | Modification Number / Title:<br>1 / ACD WS 0208088F |                                   |                                   |  |
| ID Code (A=Service Ready, B=Not Service Ready):         |                                   |                                     | MDAP/MAIS Co                      |   |                                   |                                   |  |
| Models of Systems Affected: ACD                         | Modif                             | ication Type: Reliabili             | ty & Maintainability              | Related RDT   | <b>&amp;E PEs:</b> 0303112F       |                                   |  |
|   | Prior Years                       | FY 2016                             | FY 2017                           | FY 2018 Base  | FY 2018 OCO                       | FY 2018 Total                     |  |
| Financial Plan  | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)   | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)                   | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M) |  |
| Procurement   |                                   |                                     |                                   |   | ,                                 |                                   |  |
| Modification Item 1 of 1: ACD MODs                      |                                   | _                                   |                                   |   | _                                 |                                   |  |
| B Kits  |                                   |                                     |                                   |   |                                   |                                   |  |
| Recurring   |                                   |                                     |                                   |   |                                   |                                   |  |
| ACD MODs:EQUIPMENT Group B (Active)                     | - 1 -                             | - 1 -                               | 1 / 6.376                         | 1 / 24.833  | - 1 -                             | 1 / 24.833                        |  |
| Subtotal: Recurring                                     | - / -                             | - / -                               | - /6.376                          | - /24.833   | - / -                             | - /24.833                         |  |
| Subtotal: ACD MODs                                      | - / -                             | - / -                               | - /6.376                          | - /24.833   | - / -                             | - /24.833                         |  |
| Subtotal: Procurement, All Modification Items           | - / -                             | - / -                               | - /6.376                          | - /24.833   | - / -                             | - /24.833                         |  |
| Support (All Modification Items)                        |                                   |                                     |                                   |   |                                   |                                   |  |
| PMA - Contractor Services                               | - 1 -                             | - 1 -                               | - /0.734                          | - /3.337  | - 1 -                             | - 13.337                          |  |
| PMA - Other Gov't Costs                                 | - 1 -                             | - 1 -                               | - / 0.626                         | - 12.744  | - 1 -                             | - 12.744                          |  |
| Subtotal: Support                                       | - / -                             | - / -                               | - /1.360                          | - /6.081  | - / -                             | - /6.081                          |  |
| Installation  |                                   |                                     |                                   |   |                                   |                                   |  |
| Subtotal: Installation                                  | - / -                             | - / -                               | - / -                             | - / -   | - / -                             | - / -                             |  |
| Total   |                                   |                                     |                                   |   |                                   |                                   |  |
| Total Cost (Procurement + Support + Installation)       | -                                 | 0.000                               | 7.736                             | 30.914  | 0.000                             | 30.914                            |  |

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|---|------------------|-------------------------------------|-------------------------------------|---|
| Exhibit P-3a, Individual Modification: F                  | Y 2018 Air Force |                                     |                                     | Date: May 2017                                      |
| Appropriation / Budget Activity / Budge<br>3080F / 03 / 5 |                  | P-1 Line Item Nun<br>835080 / AFNET | nber / Title:                       | Modification Number / Title:<br>1 / ACD WS 0208088F |
| ID Code (A=Service Ready, B=Not Service Ready):           |                  | ·                                   | MDAP/MAIS Code:                     |   |
| Modification Item 1 of 1: ACD MODs                        |                  |                                     |                                     |   |
| Manufacturer Information                                  |                  |                                     |                                     |   |
| Manufacturer Name: Multiple                               |                  |                                     | Manufacturer Location: Various      |   |
| Administrative Leadtime (in Months): 7                    |                  |                                     | Production Leadtime (in Months): 12 |   |
| Dates   |                  | FY 2016                             | FY 2017                             | FY 2018   |
| Contract Dates  |                  |                                     | May 2017                            | May 2018  |
| Delivery Dates  |                  |                                     | May 2018                            | May 2019  |
| Installation Information                                  |                  |                                     |                                     |   |
| Method of Implementation (Organic): Org/Interme           | diate            |                                     | Install                             | lation Quantity: 6                                  |
|   |                  |                                     |                                     |   |
|   |                  |                                     |                                     |   |

LI 835080 - AFNET Air Force

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 5

Date: May 2017

Item Number / Title [DODIC]:
- / Space Superiority Intelligence

| ID Code (A=Service Ready, B=Not Service Ready) : A |                                   | MI                        | DAP/MAIS Code:            |              |             |               |
|--|-----------------------------------|---------------------------|---------------------------|--------------|-------------|---------------|
| Resource Summary                                   | Prior Years                       | FY 2016                   | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)               | -                                 | 1                         | 1                         | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)          | 0.000                             | 2.337                     | 5.110                     | 0.000        | 0.000       | 0.000         |
| Less PY Advance Procurement (\$ in Millions)       | -                                 | -                         | -                         | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)             | 0.000                             | 2.337                     | 5.110                     | 0.000        | 0.000       | 0.000         |
| Plus CY Advance Procurement (\$ in Millions)       | -                                 | -                         | -                         | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)        | 0.000                             | 2.337                     | 5.110                     | 0.000        | 0.000       | 0.000         |
| (The following Resource Summary rows are for in:   | formational purposes only. The co | responding budget request | s are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                    | -                                 | -                         | -                         | -            | -           | -             |

2.337

5.110

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Gross/Weapon System Unit Cost (\$ in Millions)

|  | F           | Prior Years   | s                       | FY 2016   |               |                         | FY 2017   |               |                         | / 2018 Ba | se            | F                       | <b>/ 2018 OC</b> | :0            | F'                      | Y 2018 Tot | al                   |                         |
|--|-------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------------|---------------|-------------------------|------------|----------------------|-------------------------|
| Cost Elements                                      | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost        | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - AF Cyber ISR Pla                        | atform Cost |               | '                       |           |               |                         | '         |               |                         | ,         |               |                         |                  |               | '                       | '          |                      | '                       |
| Non Recurring Cost                                 |             |               |                         |           |               |                         |           |               |                         |           |               |                         |                  |               |                         |            |                      |                         |
| Prime Contractor                                   | -           | -             | 0.000                   | 1.469     | 1             | 1.469                   | 4.235     | 1             | 4.235                   | -         | -             | 0.000                   | -                | -             | 0.000                   | -          | -                    | 0.00                    |
| Subtotal: Non Recurring<br>Cost                    | -           | =             | 0.000                   | -         | =             | 1.469                   | -         | -             | 4.235                   | -         | -             | 0.000                   | -                | =             | 0.000                   | -          | -                    | 0.00                    |
| Subtotal: Hardware - AF<br>Cyber ISR Platform Cost | -           | -             | 0.000                   | -         | -             | 1.469                   | -         | -             | 4.235                   | -         | -             | 0.000                   | -                | -             | 0.000                   | -          | -                    | 0.00                    |
| Support - AF Cyber ISR Platfe                      | orm Cost    |               |                         |           |               |                         |           |               |                         |           |               |                         |                  |               |                         |            |                      |                         |
| PMA Contractor Support                             | -           | -             | -                       | -         | -             | 0.868                   | -         | -             | 0.875                   | -         | -             | -                       | -                | -             | -                       | -          | -                    | -                       |
| Subtotal: Support - AF Cyber<br>ISR Platform Cost  | -           | -             | -                       | -         | -             | 0.868                   | -         | -             | 0.875                   | -         | -             | -                       | -                | -             | -                       | -          | -                    | -                       |
| Gross/Weapon System<br>Cost                        | -           | -             | 0.000                   | 2.337     | 1             | 2.337                   | 5.110     | 1             | 5.110                   | -         | -             | 0.000                   | -                | -             | 0.000                   | -          | -                    | 0.00                    |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force              |   | Date: May 2017  |
|---|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5 | P-1 Line Item Number / Title:<br>835080 / AFNET | Modification Number / Title:<br>1 / AFINC/CSCS WS 0303089 |
| ID Code   | MDAD/MAIC Coo                                   |   |

| 00001 7 00 7 0  | 000000771                      |                        |                              |              | " ITTO/ 0000 TTO 0000000 |               |  |  |  |
|---|--------------------------------|------------------------|------------------------------|--------------|--------------------------|---------------|--|--|--|
| ID Code (A=Service Ready, B=Not Service Ready):       | ·                              | I                      | MDAP/MAIS Code:              |              |                          |               |  |  |  |
| Resource Summary                                      | Prior Years                    | FY 2016                | FY 2017                      | FY 2018 Base | FY 2018 OCO              | FY 2018 Total |  |  |  |
| Procurement Quantity (Units in Each)                  | -                              | -                      | -                            | -            | -                        | -             |  |  |  |
| Gross/Weapon System Cost (\$ in Millions)             | -                              | 17.30                  | 09 105.586                   | 129.906      | 0.000                    | 129.906       |  |  |  |
| Less PY Advance Procurement (\$ in Millions)          | -                              | -                      | -                            | -            | -                        | -             |  |  |  |
| Net Procurement (P-1) (\$ in Millions)                | -                              | 17.30                  | 09 105.586                   | 129.906      | 0.000                    | 129.906       |  |  |  |
| Plus CY Advance Procurement (\$ in Millions)          | -                              | -                      | -                            | -            | -                        | -             |  |  |  |
| Total Obligation Authority (\$ in Millions)           | -                              | 17.30                  | 105.586                      | 129.906      | 0.000                    | 129.906       |  |  |  |
| (The following Resource Summary rows are for informat | ional purposes only. The corre | esponding budget reque | ests are documented elsewher | re.)         |                          |               |  |  |  |
| Initial Spares (\$ in Millions)                       | -                              | -                      | -                            | -            | -                        | -             |  |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions)        | -                              | -                      | -                            | -            | -                        | -             |  |  |  |

### **Description:**

PE 0303089F executes requirements for both Cyberspace Security and Control System (CSCS) and Air Force Intranet Control (AFINC) weapon systems. Funds may be used for other AFNet requirements if required.

(1) AFINC: Procures and installs equipment for network operations, network defense and overall management of the AF NIPRNet Gateways and the Information Management Suite as well as the Air Force discrete requirements associated with the Joint Regional Security Stacks (JRSS). Efforts include, but are not limited to:

AFNet NIPR Gateways (MAC-1 system) and SIPR Gateways (GW), which deliver critical network defense capabilities for the AF enterprise with over 800k users directly supporting flying, maintenance, space and cyber operations across the full range of military operations. GWs prevent and detect unauthorized network infiltration attempts, automatically initiating network defense countermeasures eliminating adversary ability to gain access to the enterprise which would diminish the AF information defense posture. GWs directly support cyber operations worldwide enabling war-fighting missions. With the migration of all Air Force installations to JRSS the GWs will sunset. Funding enables the removal of systems dependent on the GWs and subsequent decommissioning of the GWS. Includes recapitalization of the Integrated Management Suite, which provides for real-time centralized Out of band Management of network devices, and unifies the management/defense of AF networks and assets, as well as procures equipment upgrades that directly relate to the migration of AF traffic and technology transition from the AFNet NIPR Gateways to the Joint Regional Security Stacks (JRSS).

(2) CSCS: Procures and installs capabilities contributing to cyber mission assurance, including proactive defense and persistent network operations for the Air Force and the Air Force-provisioned portions of the DoD Information Network (DoDIN) and the Air Force Information Network (AFIN). CSCS modifications support the following activities: fault resolution activities to maintain operational capabilities; lead-in coordinating activities at base-level Network Control Centers for necessary network security actions; monitoring of AF network services; managing of boundary protection devices and the Air Force network infrastructure; and continuous network situational awareness. Efforts include, but are not limited to:

Data Center Consolidation and migration to the Joint Information Environment (JIE); upgrades to Core Services and Air Force Vulnerability Management (AFVM) and Network Management.

FY18 will procure upgrades for CSCS and AFINC based on 1067 requests. CSCS includes, but is not limited to Vulnerability Management, Area Processing Center and Regional Data Center Consolidations, and Installation Processing Nodes ACAS upgrades. AFINC includes, but is not limited to, Gateway e-mail security/DNS upgrades.

Milestone/Development Status

Sustainment

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| Exhibit P-3a, Individual Modification: FY               | 2018 Air Force                                  |                                      |                                   |  | <b>Date:</b> May 2017             |   |
|---|---|--------------------------------------|-----------------------------------|--|-----------------------------------|---|
| Appropriation / Budget Activity / Budget 3080F / 03 / 5 | Sub Activity:                                   | P-1 Line Item Numb<br>835080 / AFNET | er / Title:                       | Modification Number / Title: 1 / AFINC/CSCS WS 0303089 |                                   |   |
| ID Code (A=Service Ready, B=Not Service Ready):         |   | ·                                    | MDAP/MAIS Co                      | de:  |                                   |   |
| Models of Systems Affected: AFINC-CSC                   | CS-WS Mo  | dification Type: Reliabil            | ity & Maintainability             | Related RDT  | <b>&amp;E PEs:</b> 0303112F       |   |
|   | Prior Years                                     | FY 2016                              | FY 2017                           | FY 2018 Base   | FY 2018 OCO                       | FY 2018 Total                                   |
| Financial Plan  | Qty <i>(Each) I</i><br>Total Cost <i>(\$ M)</i> | Qty (Each) I<br>Total Cost (\$ M)    | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)                      | Qty (Each) I<br>Total Cost (\$ M) | Qty <i>(Each) I</i><br>Total Cost <i>(\$ M)</i> |
| Procurement   |   |                                      |                                   |  |                                   |   |
| Modification Item 1 of 1: AFINC/CSCS WS MODs            |   |                                      |                                   |  |                                   |   |
| B Kits  |   |                                      |                                   |  |                                   |   |
| Recurring   |   |                                      |                                   |  |                                   |   |
| AFINC/CSCS WS MODs:EQUIPMENT Group B (Active)           |   | 1 / 14.198                           | 1 / 87.004                        | 1 / 107.427  | - 1 -                             | 1 / 107.427                                     |
| Subtotal: Recurring                                     | - ,   | - /14.198                            | - /87.004                         | - /107.427   | - / -                             | - /107.427                                      |
| Subtotal: AFINC/CSCS WS MODs                            | - ,   | ' / 14.198                           | - /87.004                         | - /107.427   | - / -                             | - /107.427                                      |
| Subtotal: Procurement, All Modification Items           | - ,   | ' -   - /14.198                      | - /87.004                         | - /107.427   | - / -                             | - /107.427                                      |
| Support (All Modification Items)                        |   |                                      | •                                 |  |                                   |   |
| PMA - Contractor Services                               | - ,   | - / 1.679                            | - /10.030                         | - / 12.699   | - 1 -                             | - / 12.699                                      |
| PMA - Other Gov't Costs                                 | - ,   | - / 1.432                            | - /8.552                          | - 19.780   | - 1 -                             | - 19.780  |
| Subtotal: Support                                       |   | - /3.111                             | - /18.582                         | - /22.479  | - / -                             | - /22.479                                       |
| Installation  |   |                                      |                                   |  |                                   |   |
| Subtotal: Installation                                  | - ,   | - / -                                | - / -                             | - / -  | - / -                             | - / -   |
| Total   |   |                                      |                                   |  |                                   |   |
| Total Cost (Procurement + Support + Installation)       |   | - 17.309                             | 105.586                           | 129.906  | 0.000                             | 129.906   |

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|--|----------------|--|---|
| Exhibit P-3a, Individual Modification: F)              | 2018 Air Force |  | <b>Date:</b> May 2017                                     |
| Appropriation / Budget Activity / Budge 3080F / 03 / 5 |                | Line Item Number / Title:<br>080 / AFNET | Modification Number / Title:<br>1 / AFINC/CSCS WS 0303089 |
| ID Code (A=Service Ready, B=Not Service Ready):        | 1              | MDAP/MAIS Code:                          | ,   |
| Modification Item 1 of 1: AFINC/CSCS WS MODs           |                | •  |   |
| Manufacturer Information                               |                |  |   |
| Manufacturer Name: Multiple                            |                | Manufacturer Location: Various           |   |
| Administrative Leadtime (in Months): 7                 |                | Production Leadtime (in Months): 12      |   |
| Dates  | FY 2016        | FY 2017                                  | FY 2018   |
| Contract Dates   | May 2016       | May 2017                                 | May 2018  |
| Delivery Dates   | May 2017       | May 2018                                 | May 2019  |
|  |                |  |   |
| Installation Information                               |                |  |   |
| Method of Implementation (Organic): Org/Intermed       | diate          | Ir                                       | nstallation Quantity: 7                                   |
|  |                |  |   |
|  |                |  |   |

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 P-1 Line #41

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| Exhibit P-40a, Budget Item Justification For Aggregated Mo | odification Items: FY 2018 Air Force | Date: May 2017                       |
|--|--------------------------------------|--------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:     | P-1 Line Item Number / Title:        | Aggregated Modification Items Title: |
| 3080F / 03 / 5   | 835080 / AFNET                       | Air Force Communications (AIRCOM)    |

|                        |    |                       |           |               |                         |           |               |                         |           |                      |                         |                         |                      |                         |           |               |                         |           | `             | ,                       |
|------------------------|----|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-------------------------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                        |    |                       | P         |               |                         |           | FY 2016       | 6 FY 2017 FY            |           |                      |                         | Y 2018 Base FY 2018 OCO |                      |                         |           | FY 2018 Total |                         |           |               |                         |
| Item Number / Title    | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost               | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Mod 1 0303112F / AFNET |    |                       | -         | -             | 90.487                  | -         | -             | 29.448                  | -         | -                    | 28.465                  | -                       | -                    | -                       | -         | -             | -                       | -         | -             | -                       |
| Total                  |    |                       | -         | -             | 90.487                  | -         | -             | 29.448                  | -         | -                    | 28.465                  | -                       | -                    | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### **Modification Information:**

| Item Number / Title    | Models of Systems Affected | Modification Type             |
|------------------------|----------------------------|-------------------------------|
| Mod 1 0303112F / AFNET | AFNET                      | Reliability & Maintainability |

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 P-1 Line #41

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

835110 / Joint Communications Support Element (JCSE)

Equip / BSA 5: Air Force Communications

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021  | FY 2022  | To<br>Complete | Total  |
|--|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|----------------|----------|----------|----------------|--------|
| resource outlinary                             | Icars          | 1 1 2010         | 1 1 2017          | Dasc             | 000              | iotai            | 1 1 2013        | 1 1 2020       | 1 1 2021 | 1 1 2022 | Complete       | iotai  |
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 5.199            | 5.182             | 5.135            | 0.000            | 5.135            | 5.226           | 5.319          | 5.415    | 5.514    | -              | 36.990 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Net Procurement (P-1) (\$ in Millions)         | -              | 5.199            | 5.182             | 5.135            | 0.000            | 5.135            | 5.226           | 5.319          | 5.415    | 5.514    | -              | 36.990 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Total Obligation Authority (\$ in Millions)    | -              | 5.199            | 5.182             | 5.135            | 0.000            | 5.135            | 5.226           | 5.319          | 5.415    | 5.514    | -              | 36.990 |
| (The following                                 | Resource Sum   | mary rows are fo | r informational p | urposes only. Th | he corresponding | budget request   | s are documente | ed elsewhere.) |          |          |                |        |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | _      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -                | _                | -               | _              | -        | -        | -              | _      |

### **Description:**

JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE): JCSE, assigned under Joint Enabling Capabilities Command, US Transportation Command, is the only joint Department of Defense (DoD) unit specifically formed to provide command, control, communications, and computers (C4) systems support for Joint Chiefs of Staff (JCS) contingency operations worldwide. The Joint Communications Support Element (JCSE) mission is to provide, on short notice, those critical communications required to support Joint Task Force support (JTF) and Joint Special Operations Task Force (JSOTF) headquarters. These assets support the warfighter's ability to deploy rapidly and immediately provide the positive command and control required. This support includes contingency and crisis communications for the Joint Chiefs of Staff, Combatant Commands, Services, Defense agencies, non-Defense agencies, and foreign governments. Program goals include meeting emerging real-world operational requirements with the maximum capabilities, smallest footprint, lowest operations and maintenance costs, and seamless integration with the global information grid. Per Defense Planning Guidance (DPG) and Director, Joint Staff Memorandum (DJSM)0291-14, the Air Force is mandated to fund 1/3rd fair share of JCSE's validated Modernization Program.

Funding for this exhibit is contained in PE 0207422F, Deployable Command, Control, and Communications (C3) Systems.

#### Justification:

JCSE: FY2018 base funding procures communications equipment based on Strategic Planning Guidance. This includes the maximum capabilities for narrowband, wideband and protected satellite communications (SATCOM) terminals and systems, tactical radios, terrestrial communications systems, satellite hubs, networking elements, virtual appliances, Video Teleconferencing (VTC) capabilities, alternative power solutions, Airborne /En-Route, Forced Entry, Cyber Security, and Mobile Joint C2 equipment. Advancements in technology have provided opportunities to modernize current equipment sets with enhanced capabilities to meet the program goals which include meeting emerging real-world operational and cyber defense requirements with maximum capabilities, the smallest possible footprint, lowest operations and maintenance costs, and seamless integration with the global information grid. This equipment is a critical part of Command, Control and Communications packages that provide direct operational support to joint forces and HQ elements deployed to austere locations around the globe. Per the Planning Guidance, the Air Force is mandated to fund one-third of the fair share of JCSE's validated equipment modernization plan. JCSE's Program is built/restructured based on Combatant Command (CCMD) and Service Components' requirements and emerging technologies. The Services influence JCSE's spending plan through recommendations in concert with Major Defense Acquisition Program (MDAP) schedules, ensuring that Service dollars meet Joint Service requirements.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

835140 / USCENTCOM

Equip / BSA 5: Air Force Communications

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 25.780           | 13.418            | 18.719           | 0.000            | 18.719         | 17.505          | 17.813        | 18.133  | 18.460  | -        | 129.828 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 25.780           | 13.418            | 18.719           | 0.000            | 18.719         | 17.505          | 17.813        | 18.133  | 18.460  | -        | 129.828 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 25.780           | 13.418            | 18.719           | 0.000            | 18.719         | 17.505          | 17.813        | 18.133  | 18.460  | -        | 129.828 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | - [      | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |

### Description:

PE 0201122F USCENTCOM COMMUNICATIONS

HQ USCENTCOM's mission is to work with its national and international partners in promoting development and cooperation among nations, responding to crises, and deterring or defeating state and transnational aggression in order to establish regional security and stability across its entire Area of Responsibility (AOR). Since USCENTCOM's AOR, covering the Middle East, includes the challenges of regional stability and violent extremists, this Combatant Command's mission is critical in regards to the Overseas Contingency Operations (OCO). To meet its mission responsibilities across this geographical expanse, HQ USCENTCOM must rely heavily on Command, Control, Communications, and Computer (C4) systems capable of achieving full spectrum information superiority.

Funding for this effort is contained in PE 0201122F USCENTCOM Communications.

USCENTCOM COMMAND AND CONTROL SYSTEMS: Effort will provide end of life replacement for, but not limited to, Command and Control (C2) systems (thin client, server, etc), Joint Information Environment (JIE), classified and unclassified voice, data and video dissemination, storage area network (SAN) infrastructure, establishment of the CENTCOM Partner Network (CPN) which provides a new secure network for bilateral / multilateral information sharing up to the SECRET RELEASABLE level. Support maximum data storage capacity requirements for HQ war records collection, Modeling & Simulation Systems (J8MS), and uninterrupted power supply (UPS) required for the command's collateral classified and unclassified data networks. This equipment provides HQ USCENTCOM with effective C4 systems to effectively conduct current and future operations throughout the AOR.

PE 0201131F AIR COMBAT COMMAND (ACC) COMMUNICATIONS

Air Forces United States Central Command (AFCENT) is the ACC component designated to support USCENTCOM operations in deployed theaters for the AF. Funds C4 systems throughout the area of responsibility (AOR). Procurement efforts include: communications infrastructure requirements, satellite terminal equipment, data network servers and associated information assurance tools, information transfer nodes and routers, joint radio relays, as well as deployed air traffic control and landing systems and navigational aid systems.

Justification:

PE 0201122F USCENTCOM COMMUNICATIONS

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|   | UNCLASSIFIED   |   |  |  |  |  |  |  |
|---|--|---|--|--|--|--|--|--|
| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force   |  | <b>Date</b> : May 2017  |  |  |  |  |  |  |
| Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecomme Equip / BSA 5: Air Force Communications   |  | P-1 Line Item Number / Title:<br>835140 / USCENTCOM   |  |  |  |  |  |  |
| ID Code (A=Service Ready, B=Not Service Ready): A Program Elements  | for Code B Items: N/A  | Other Related Program Elements: N/A   |  |  |  |  |  |  |
| Line Item MDAP/MAIS Code: N/A  USCENTCOM COMMAND AND CONTROL SYSTEMS: FY18 funding will procure C4 equil HQ at Al Udeid, Qatar, to effectively conduct communications support missions impacting C Technology (IT) supporting the command must be replaced to meet the ever increasing der STORAGE CAPABILITIES: HQ CENTCOM and CENTCOM Forward HQ require maximum implemented. | Command and Control (C2) and open<br>mands of current, ongoing continger | rational missions conducted by the Commander and staff. The C4/Information acy operations, and the growth of data storage requirements. |  |  |  |  |  |  |
| PE 0201131F AIR COMBAT COMMAND (ACC) COMMUNICATIONS FY18 funds will provide BASE COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, AND INTELLIGENCE locations identified for post OEF support. This effort is required at several AFCENT location required by DoD CIO mandate.   | E (C4I) INFRASTRUCTURE. This F   |   |  |  |  |  |  |  |
| SWA-THEATER ENTERPRISE REQUIREMENTS - To meet Unified Capabilities (UC) requarchitecture in 2017, AFCENT must replace legacy Promina equipment at GSUs. AFCENT average 2 base openings and/or closures per year regardless of new or ongoing contingence.   | must also procure new systems to s                                       | ,   |  |  |  |  |  |  |
| JOINT INFORMATION ENVIRONMENT: Implementation of JIE at MacDill AFB with CENTO  | COM acting as the possible regional                                      | node.   |  |  |  |  |  |  |
| FY18 effort will continue to support infrastructure and services essential secure networks fo necessary to securely and safely integrate coalition sensors and C2 capabilities with C2 efforts.   |  |   |  |  |  |  |  |  |
|   |  |   |  |  |  |  |  |  |
|   |  |   |  |  |  |  |  |  |
|   |  |   |  |  |  |  |  |  |

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 P-1 Line #43

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837100 / Tactical C-E Equipment

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 138.969          | 152.136           | 123.206          | 0.000            | 123.206        | 147.621         | 94.039        | 95.753  | 97.505  | -        | 849.229 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 138.969          | 152.136           | 123.206          | 0.000            | 123.206        | 147.621         | 94.039        | 95.753  | 97.505  | -        | 849.229 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 138.969          | 152.136           | 123.206          | 0.000            | 123.206        | 147.621         | 94.039        | 95.753  | 97.505  | -        | 849.229 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | =              | -               | -             | -       | -       | -        | -       |

### **Description:**

Tactical Airborne Control Systems PE 0207418F - P-5
PE 0207418F TACTICAL AIRBORNE CONTROL SYSTEM EQUIPMENT

Tactical airborne control system equipment encompass three types of simulators that provide scenario based training for Joint Terminal Attack Controllers (JTACs), Combat Control Teams (CCTs), Tactical Air Control Party (TACPs), Air Support Operations Centers (ASOCs) and various Close Air Support (CAS) Platforms.

Joint Terminal Control Training and Rehearsal System (JTC TRS): TACP Fixed and Portable Simulators comprise JTC TRS. This simulator project trains personnel controlling air support for combat operations by providing both a stand-alone and Distributed Mission Operations (DMO)-capable high-fidelity JTAC, and Combat Control Team (CCT) simulation system. The JTC TRS will be able to connect to DMO networks to allow geographically separated high-fidelity close air support platforms, JTACs and CCTs to train together in a risk-free environment. The Fixed simulator enables operators to conduct Joint Close Air Support (JCAS) training/mission rehearsal using tailored, dynamic scenarios that are relevant to mission tasking. Furthermore, the simulator will be capable of providing tactical air traffic control training for CCT using tactical application of austere airbase operations. The JTAC simulators provide DMO capability to network with aircrew full mission training centers, and Air Support Operations Centers (ASOC). Its primary focus is to provide an air-ground virtual training environment for networked air ground training and mission rehearsal capability that will develop both JTAC and CCT skills and train aircrew to accomplish complex JCAS missions in close proximity to friendly ground forces. JTAC simulators will be fully interoperable with joint/sister Service air ground simulation using industry standards. Training with simulators has the potential to reduce civilian casualties, collateral damage and fratricide by improving coordination skills between air and ground personnel, and increasing JTAC and aircrew proficiency. The acquisition strategy for production of the fixed configuration of the JTC TRS will be executed as an evolutionary acquisition approach using incremental development. Until the production system is ready for fielding, interim simulators will be fielded to support JTAC qualification training and readiness for deployable JTACs. DMS efforts to include removal of end-of-life software/hardware within

TACP C2 Simulator: The Joint Theater Air-Ground Simulation System (JTAGSS) is the TACP C2 Simulator. The simulator is for training ASOC and Special Operations Forces (SOF) personnel to perform command and control (C2) battlestaff operations. The C2 simulator will operate in either a stand-alone mode, or connected to other DMO-capable high-fidelity simulation facilities to allow geographically-

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P-1 Line #44

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F; Other Procurement, Air Force / BA 03; Electronics and Telecommunications 837100 / Tactical C-E Equipment

Equip / BSA 7: Organization and Base

P-1 Line Item Number / Title:

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A

separated Theater Air Control System C2 elements, CAS platforms, and JTAC and CCT personnel to train in an integrated virtual environment. The simulator will enable operators to conduct C2 training and mission rehearsal of JCAS assets using tailored, dynamic scenarios that are relevant to current real-world mission taskings. Scenarios will cover the full range of military operations. Training with the simulator will improve mission effectiveness by reducing the risk of civilian casualties, collateral damage, and fratricide by improving C2 skills in rapidly changing and uncertain combat environments. The JTAGSS program will enable procurement of an estimated three JTAGSS for air support operations training. The acquisition strategy for the TACP C2 simulator will be to field advance technology demonstration units in two increments. Increment 1 will field initial capability to perform proof of concept and technology validation of mission simulations for all ASOC crew positions including detailed communications planning, asset deconfliction, integration of joint fires, and other critical mission areas required for integrated TACP/ASOC C2 mission success. At the completion of the technology validation, a contract will be competitively awarded to complete simulator development, deployment and integration.

Funding for this exhibit is contained in PE 0207418F.

Security Forces (SF)Tactical Communication Radios - 0207588F - P40A

FY17 funds are required to replace, reconstitute, and update critical communication equipment that's forward deployed from stateside bases and AFCENT to support missions within the AOR. Transformation to a wideband networking radio is required to communicate with joint and coalition forces. Additionally, SATCOM reach-back is inherent to SF operations. Funding is also required to ensure radios are compatible with SATCOM waveforms like Broadband Global Area Network (BGAN) and the new Navv-led Mobile User Objective System (MUOS), which legacy radios are not compatible with wideband networking. BGAN. or MUOS.

Deployable C3 Systems PE 0207422F - P-40A PE 0207422F DEPLOYABLE COMMAND, CONTROL, and COMMUNICATIONS (C3) SYSTEMS

THEATER-DEPLOYABLE COMMUNICATIONS (TDC) PROGRAM: TDC is used to extend network data, voice and video services to expeditionary and battlefield forces. The TDC system provides stand-alone communications support for the full range of military operations and communications capability for Command and Control (C2) reach back at and above the tactical level for a variety of Air Force missions. TDC provides a rapidly deployable communication infrastructure package, which provides deployed users with secure and non-secure voice service, internet access, local area network, network management, information assurance, e-mail services (NIPR/SIPRNET), and intra/inter-base connectivity services similar to those established on a fixed base. The TDC package uses commercial-off-the-shelf (COTS) components to support a wide scope of expeditionary missions ranging from a small C2 and airfield mission, supporting 1 to 150 users, and up to the stand-up of an Air Expeditionary Wing supporting 3,000 users. The TDC package also supports Special Missions, to include noncombatant evacuation and disaster relief efforts, US Secret Service support, and Homeland Defense Operations. TDC as directed in Headquarters United States Air Force (HQ USAF) Program Action Directive (PAD) 12-07, and as identified from the Secretary of the Air Force (SAF) directed RAND Study is employed to provide and support 22 Large Communications Package missions at Combat Communications squadrons, 27 Medium Communications Package missions at Combat Communications and Global Mobility Readiness squadrons and 55 Small Communications Package missions at Air Mobility Command units and Air Control squadrons.

The TDC program reached full operational capability in 2008 and is currently providing sustainment and procuring and installing end of life/end of support and new requirement efforts to maintain full operational capability. Replacement efforts focus on addressing Diminishing Manufacturing Sources (DMS) issues associated with COTS components. Funding of the TDC program will procure hardware and software targeted to alleviate interoperability and software issues that arise from the constant evolution of technology. Controlled items will be funded with investment funds to purchase military communications equipment classified as critical protection items. Funding will also ensure TDC equipment maintains compliance with security mandates/directives and cryptographic standards. The program has three components:

a. HUB AND SPOKE SATELLITE TERMINALS: Satellite terminals provide two-way communications connectivity between expeditionary bases and reach back, through Defense Information System Agency (DISA) teleports, to the global information grid. These terminals augment limited DOD X-Band (Super High Frequency) resources by providing access to commercial satellite services. By augmenting the X-Band terminals, TDC's Spoke Satellite terminals transparently improve the expeditionary workforce's bandwidth throughout for high-speed voice, data, video, and imagery transmissions. Small aperture SATCOM terminals supporting direct internet protocol connection capable of supporting multi-commercial and military transmission bands significantly reduce airlift requirements and provide flexibility during expeditionary operations.

b. INTEGRATED COMMUNICATIONS ACCESS PACKAGE (ICAP): ICAP provides the distributed base backbone which includes: hubs/routers, switches, multiplexers, secure/non-secure telephones, secure conferencing, cryptographic and timing equipment, and intra-base connectivity using fiber and/or point-to-point radios. ICAP packages include accessories and configuration kits to tailor the capability of voice and

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P-1 Line #44

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 837100 / Tactical C-E Equipment

Equip / BSA 7: Organization and Base ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A

data modules (i.e. cards to interface to the host nation postal telegraph and telephone). ICAP packages are modular which allows assets to be deployed incrementally and provides the capability to expand the network as the base population increases.

c. NETWORK CONTROL CENTER-DEPLOYED (NCC-D): NCC-D provides deployed network management, information protection, and network planning capabilities similar to those at fixed bases. Specific functions include data management, intrusion detection, and firewall capabilities for both the classified and unclassified networks.

Changes in cost are due to the quantity of equipment, number of users they support, and the configurations of the three components. Size of packages vary from year to year.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Funding for this exhibit contained in PE 0207422F.

Advanced Communications Systems PE 0207423F - P-5 PE 0207423F JOINT TACTICAL RADIO SYSTEMS/JTRS

The Joint Tactical Radio System (JTRS) is a family of software programmable tactical radios that provide voice, data, and video communications for military users in the air, on the ground, and at sea. Common radio architecture and programmable software waveforms will provide joint interoperability between the services. The JTRS program is built around an open system software communications architecture (SCA), a critical set of rules that make software programmable radios function properly and ensure interoperability. Funding for this exhibit is contained in PE 0207423F.

Tactical Air Control Party-Mod PE 0207444F - P-5

TACTICAL AIR CONTROL PARTY-MODERNIZATION (TACP-M): TACPs are Air Force units manned by airmen who advise Army Ground Commanders and plan, request and control air power in support of army ground maneuver operations.

The purpose of the TACP-Modernization program is to provide TACP voice, data and video communications, targeting and battlefield awareness capabilities. These capabilities are employed at all echelons of Army organizations by: Air Support Operation Centers (ASOCs), Division TACPs, Brigade TACPs, Battalion TACPs, and Joint Terminal Attack Controllers (JTACs) deployed with Army companies or scout teams on the front lines. Improved targeting and data communications capabilities provide more accurate target coordinates, reduce close air support (CAS) response times, and reduce the probability of fratricide or collateral damage through the use of networked data communications.

TACPs also coordinate, request, and control airlift support and intelligence, surveillance, and reconnaissance (ISR) support for Army combat operations, and they provide ground communications support for federal disaster response and Homeland Defense operations. TACPs deploy with their aligned Army units and operate in a variety of environments including fixed operations from tactical operations centers (TOCs), mobile operations in tactical vehicles, and dismounted (on foot) operations with Army infantry patrols.

The TACP-M program provides and modernizes capabilities in the following major areas: (1) Tactical Operations Center (TOC) Systems (used in fixed operations centers). (2) Vehicle Mounted Systems (used in TACP tactical vehicles), (3) Dismounted Systems (used by JTACs during dismounted infantry operations), and (4) Close Air Support System (CASS) software. The TACP-M program also works closely with the Battlefield Airmen Office program to procure dismounted JTAC equipment. This teaming arrangement helps standardize battlefield airmen equipment, improve efficiency by consolidating acquisition efforts, and often reduces unit costs by increasing procurement quantities. Frequent TACP combat deployments sometimes lead users to change equipment procurement priorities to support urgent operational needs and respond to evolving threat environments.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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LI 837100 - Tactical C-E Equipment Air Force

P-1 Line #44

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837100 / Tactical C-E Equipment

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready); A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A

Funding for this exhibit contained in PE 0207444F.

Special Tactics / Combat Control PE 0408011F - P-5 PE 0408011F SPECIAL TACTICS / COMBAT CONTROL

BATTLEFIELD AIRMEN OPERATIONS KIT (BAO Kit): BAO Kit will deliver a System of Systems (SoS) that provides a state-of-the-art Command, Control, Communications, Computer, Intelligence, surveillance and Reconnaissance (C4ISR) and also provides a suite of systems for all Air Force Specialty Codes supporting the Special Tactics (ST) community within the Air Force Special Operations Command's (AFSOC's) Battlefield Airmen Program. This program will procure and enhance technologies for battlefield airmen ST operators that are inter-operable with US and coalition special operations dismounted forces. BAO Kit allows the ability to recognize, identify, range, nominate and designate targets during both day and night. BAO Kit will also significantly reduce the time required to find, fix, track, target and engage the enemy by providing highly accurate target grid coordinates in three dimensions, generating target imagery both pre- and post-strike, and transmitting target data to command and control centers. All BAO Kit systems are light, compact and portable for use by dismounted Battlefield Airmen. Modernization efforts focus on reducing the weight of the equipment carried by the dismounted operator. The core capabilities include but are not restricted to: Human Machine Interface (HMI), Operational Control System (OCS), Line of Sight (LOS) targeting device, Non Line of Sight (XLOS) targeting device, and Machine to Machine C4ISR System. BAO also supports AFSOC TAC C2 program purchases enhanced communication systems and equipment essential for ST combat controllers, pararescue, combat weather operators, and tactical air control parties to perform their mission and communicate beyond line of site (BLOS) with rear echelon C2, in order to provide a joint operating picture. The ST operators use this equipment to gather and transmit assault zone suitability and weather data and to perform tactical airfield/assault landing/drop zone operations. Moreover, items include but not limited to training, initial spares, repairs and returns

Combat Rescue - Pararescue (AFR) PE 0503133F - P-40A PE 0503133F: COMBAT RESCUE - PARARESCUE (AFR)

Tactical communications and electrical equipment in support of special operations forces. FY16 funding includes \$4.065M for Overseas Contingency Operations.

| Soconda                | ary Distribution           | FY 2016  | FY 2017  | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019  | FY 2020  | FY 2021   | FY 2022  |
|------------------------|----------------------------|----------|----------|-----------------|----------------|------------------|----------|----------|-----------|----------|
| Seconda                | ary Distribution           | 1 1 2010 | 1 1 2017 | Dase            | 000            | iotai            | 1 1 2019 | 1 1 2020 | 1 1 202 1 | 1 1 2022 |
| AF                     | Quantity                   | 3,786    | 3,006    | 1,026           | 0              | 1,026            | 103      | 103      | 103       | 103      |
|                        | Total Obligation Authority | 126.281  | 138.335  | 88.908          | 0.000          | 88.908           | 25.834   | 14.942   | 20.887    | 21.322   |
| AFNG                   | Quantity                   | 639      | 91       | 257             | 0              | 257              | 95       | 95       | 95        | 95       |
|                        | Total Obligation Authority | 11.468   | 11.808   | 28.643          | 0.000          | 28.643           | 25.766   | 17.858   | 14.286    | 14.487   |
| AFR                    | Quantity                   | 17       | 17       | 18              | 0              | 18               | 18       | 18       | 18        | 18       |
|                        | Total Obligation Authority | 1.220    | 1.993    | 5.655           | 0.000          | 5.655            | 4.783    | 4.396    | 2.713     | 2.782    |
| Total:                 | Quantity                   | 4,442    | 3,114    | 1,301           | 0              | 1,301            | 216      | 216      | 216       | 216      |
| Secondary Distribution | Total Obligation Authority | 138.969  | 152.136  | 123.206         | 0.000          | 123.206          | 56.383   | 37.196   | 37.886    | 38.591   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837100 / Tactical C-E Equipment

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule                 |             | Prior Years | FY 2016               | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |  |  |
|-----------------|-----------------------------------|-------------|-------------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                            | Subexhibits | ID<br>CD    | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | Tactical Airborne Control Systems |             | Α           |                       | - / -                                    | 23 / 43.187                              | 4 / 15.599                               | - / 1.192                                | - / 0.000                                | - / 1.192                                |
| P-40a           | Deployable C3 Systems             |             |             |                       | - / -                                    | - / 17.350                               | - / 30.484                               | - / 56.921                               | - / 0.000                                | - / 56.921                               |
| P-5             | Advanced Communications Systems   |             | Α           |                       | - / -                                    | 604 / 9.933                              | 619 / 10.397                             | 392 / 6.485                              | - / 0.000                                | 392 / 6.485                              |
| P-5             | Tactical Air Control Party-Mod    | P-5a, P-21  | Α           |                       | - / -                                    | 2,237 / 33.327                           | 128 / 41.823                             | 693 / 43.084                             | - / 0.000                                | 693 / 43.084                             |
| P-40a           | Air Base Ground Defense           |             |             |                       | - / -                                    | - / 0.000                                | - /4.500                                 | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-5             | Special Tactics / Combat Control  |             | Α           |                       | - / -                                    | 1,377 / 31.107                           | 2,158 / 49.333                           | - / 15.524                               | - / 0.000                                | - / 15.524                               |
| P-40a           | Combat Rescue - Pararescue (AFR)  |             |             |                       | - / -                                    | - /4.065                                 | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40            | Total Gross/Weapon System Cost    |             |             |                       | - 1 -                                    | - / 138.969                              | - / 152.136                              | - / 123.206                              | - / 0.000                                | - / 123.206                              |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

Tactical Airborne Control Systems PE 0207418F - P-5

TACTICAL AIRBORNE CONTROL SYSTEM EQUIPMENT: FY18 funding provides for JTC TRS program management activities to include cyber security, facilities and integration, and subject matter expertise. Funds may be used to address emerging and short-notice Diminishing Manufacturing and Material Shortage (DMSMS) issues.

Deployable C3 Systems PE 0207422F - P-40A

PE 0207422F DEPLOYABLE COMMAND, CONTROL, and COMMUNICATIONS (C3) SYSTEMS

THEATER-DEPLOYABLE COMMUNICATIONS (TDC) consists of (104) Integrated Communications Access Packages (ICAP), (51) Spoke Satellite Terminals and (61) Network Control Center-Deployed (NCC-D) components which equate to the 216 fielded systems. Changes in cost are due to the quantity of equipment, number of users they support, and the configurations of the three components. Size of packages vary from year to year.

HUB AND SPOKE SATELLITE TERMINALS: FY18 funds will procure the technical solution based on user functional requirements for tri-band SATCOM terminal replacements for end of life/end of support terminals

INTEGRATED COMMUNICATIONS ACCESS PACKAGE (ICAP): FY18 funds will complete the procurement of the technical solution based on user functional requirements for a standardized Small Communication Package (SCP) as Directed by Program Action Directive (PAD) 12-07 and additional requirements identified from the Secretary of the Air Force directed RAND Study. It will also procure a deployed wireless network capability based on user functional requirements and replace any required components that have reached end of life and are no longer supportable. End of life components may be part of kits and modules such as laptop kits, uninterruptible power supply kits. Replace hardware and software that loses cyber security vulnerability mitigations and original equipment manufacturer support as needed.

NETWORK CONTROL CENTER-DEPLOYED (NCC-D): FY18 funds will procure any required components that have reached end of life and are no longer supportable. Procure mandated upgrades as required. Replace hardware and software that loses cyber security vulnerability mitigations and original equipment manufacturer support as needed.

PE 020588F: Security Forces (SF) Tactical Communication Radios - P40A

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LI 837100 - Tactical C-E Equipment Air Force

P-1 Line #44

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

### Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837100 / Tactical C-E Equipment

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A

FY17 funding includes \$4.5M for Overseas Contingency Operations. Funds are provided to replace, reconstitute, and update critical communication equipment that's forward deployed from stateside bases and AFCENT to support missions within the AOR.

Advanced Communications Systems PE 0207423F - P-5 PE 02027423F JOINT TACTICAL RADIO SYSTEM/JTRS:

FY18 Funds will be used to purchase but not limited to, Mobile User Objective System (MUOS) satellite waveform licenses and associated antennas, cables, diplexers, and training, as well RF-7800M V255 2-channel base stations and AN/PRC-117G manpack radios. Other items to be purchased are AN/PRC-152A, 1-Channel Handheld Radio, 1-Channel Base Station, Single Vehicle Adapter, Dual Vehicle Adapter, Repeater, and RF-310M Single Channel Non-COMSEC Controlled Item (CCI) Radios. FY18 funds will also be used to procure any components to these ancillary items.

Tactical Air Control Party-Mod PE 0207444F - P-5

PE 0207444F TACTICAL AIR CONTROL PARTY-MOD

TACTICAL AIR CONTROL PARTY-MODERNIZATION (TACP-M) ACQUISITION CATEGORIES: (1) Tactical Operation Center (TOC) Systems (used in fixed operations centers), (2) Vehicle Mounted Systems (used in TACP tactical vehicles), (3) Dismounted Systems (used by JTACs during dismounted infantry operations), and (4) Close Air Support System (CASS) software. TACP-Mod procurements will also include any peripheral equipment required to conduct operations, and generally include training, documentation, initial spares, Interim Contractor support, and other fielding and sustainment activities as required. TACP-M efforts focus on modernizing technologically obsolete and end of life cycle systems with COTS components. FY18 funding will procure the following:

- 1. TACTICAL OPERATIONS CENTER (TOC) SYSTEMS: TACP TOC systems include the fielded ASOC Gateway and Gateway Light systems, the transit case mounted, transportable Dismounted Communication Package (DCP), Tactical Transportable Gateway (TTG), and TOC computer systems. TTG will replace the currently fielded ASOC Gateway and Gateway Lites. The TTG will provide the capability to receive and transmit digital messages on data link networks at the ASOC and Brigade TOCs. This will provide TACPs with battlespace awareness capabilities and line-of-sight, near real time data communications with aircraft for digitally-aided close air support operations. The TTG will include a multi-band radio for Beyond-Line-Of-Sight (BLOS) or Line-Of-Sight (LOS) networked TACP data communications, and include a Link 16 radio for data communications with strike aircraft. TTG will use generator and commercial power, include a computer to host data link control software, and include all necessary masts, antennas, cables and ancillary equipment. TTG was awarded in 2QFY17 with production fielding in FY18-19.
- 2. VEHICLE-MOUNTED SYSTEMS: TACP vehicle systems include the GRC-259 system mounted in Stryker armored vehicles, interim 2-channel mobile Voice Communications Packages (VCPs) mounted in M1165 High Mobility Multi-Wheeled Vehicles (HMMWVs), and the Mobile Communications Systems (MCS) planned for TACP M1145 HMMWVS. In FY16, the TACP program awarded a contract to procure the MCS, a modular, Internet Protocol (IP)-based system that will provide robust 4-channel, voice, data, and video communications capabilities mounted in TACP M1145 armored HMMWVs to support battlefield communications on emerging networking waveforms. These systems will use software-defined multi-band radios, tactical video receivers, computers, and ancillary equipment required to conduct CAS voice, video, and data communications. In FY18, the TACP program will compete and award a contract for the integration of an MCS Block II capability for M1165 HMMWVs and complete the purchase of M1145 Mobile Communications Systems. The TACP-M program intends to upgrade multi-channel data communications systems for M1165 HMMWVs. Future MCS efforts/capabilities will upgrade or procure M113 armored personnel carriers (used by TACPs supporting Army armored or mechanized Brigades), and future Armored Multi-Purpose Vehicles (AMPV) and Joint Light Tactical Vehicles (JLTV). The AMPV and JLTV are new armored vehicles in development by the Army to replace the aging M113 and HMMWV vehicles and will also be adopted by Air Force TACPs.
- 3. DISMOUNTED EQUIPMENT (used by JTACs during dismounted operations): Consists of a suite of equipment which provides communications, targeting and situational awareness capabilities for TACPs during dismounted infantry operations. Dismounted upgrade efforts include, but are not limited to: Operational Control System (OCS) lightweight, ruggedized, dismounted JTAC Computer Kits (consisting of a man-portable computer, smart hub, integrated battery, cabling, etc) which in conjunction with ancillary equipment, support LOS and BLOS data communications with C2 nodes, other TACPs, and support aircraft. Full Motion Video devices and accessories small light weight ruggedized off-the-shelf units that provide TACP's Type 1 encrypted transmit and receive capabilities to communicate with multiple ISR platforms; Short Wave Infrared (SWIR) Laser Spot Detector / Tracker TACPs require a small, light laser spot detector/tracker to detect and track laser spots from ground laser designators and airborne laser targeting pods and Multi--Spectral Thermal Marking Device / Beacon which is a small, lightweight, covert, and positive identification capability that can be seen or detected with CAS aircraft targeting pods or other sensors. Dismounted TACPs also require ancillary equipment which includes, but is not limited to, batteries, cables, antennas, GPS receivers, storage devices, cases, laser range finders, laser target designators and other components that facilitate the operation and/or human factor impacts of the dismounted TACP. In addition, ICS may be required to sustain some Dismounted equipment until a long-term sustainment strategy is in place. The TACP-M program will use FY18 funding to support Interim Contractor Support (ICS) for Dismounted equipment prior to transitioning to long-term sustainment.

LI 837100 - Tactical C-E Equipment Air Force

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P-1 Line #44

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837100 / Tactical C-E Equipment

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready); A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A

4. TACP CLOSE AIR SUPPORT SYSTEM (CASS) SOFTWARE INTEGRATION: TACP CASS software enables digital data communications with joint C2 nodes, other TACPs, attack aircraft, and Army C2 and Fire Support systems. It includes interfaces with ASOC, TACP and JTAC radios, and targeting devices. It also provides battlespace awareness capabilities needed to plan, request, coordinate, and control CAS in support of ground maneuver forces. FY18 funding will be used to provide software maintenance updates for fielded versions, provide new Human Machine Interface (HMI) interfaces for a dismounted version of the software, incorporate new joint Digitally-aided CAS standards, and provide contract technical and help desk support to operators employing the software. FY18 will provide ICS for fielded CASS software to include training, technical, helpdesk and cyber security support.

This funding request supports potential DMS and obsolescence solutions, to include if optimal, life of type buys or bridge buys limited to the program of record quantity.

Special Tactics / Combat Control PE 0408011F - P-5 PE 0408011F BATTLEFIELD AIRMEN OPERATIONS (BAO) Kit

BATTLEFIELD AIRMEN OPERATIONS KIT (BAO Kit): BAO Kit will deliver a System of Systems (SoS) that provides a state-of-the-art Command, Control, Communications, Computer, Intelligence, surveillance and Reconnaissance (C4ISR) and also provides a suite of systems for all Air Force Specialty Codes supporting the Special Tactics (ST) community within the Air Force Special Operations Command's (AFSOC's) Battlefield Airmen. This program will procure and enhance technologies for battlefield airmen ST operators that are inter-operable with US and coalition special operations dismounted forces. BAO Kit allows the ability to recognize, identify, range, nominate and designate targets during both day and night. BAO Kit will also significantly reduce the time required to find, fix, track, target and engage the enemy by providing highly accurate target grid coordinates in three dimensions, generating target imagery both pre- and post-strike, and transmitting target data to command and control centers. All BAO Kit systems are light, compact and portable for use by dismounted Battlefield Airmen. Modernization efforts focus on reducing the weight of the equipment carried by the dismounted operator. The core capabilities include but are not restricted to: Human Machine Interface (HMI), Operational Control System (OCS), Line of Sight (LOS) targeting device, Non Line of Sight (XLOS) targeting device, and Machine to Machine C4ISR System. BAO also supports AFSOC TAC C2 program purchases enhanced communication systems and equipment essential for ST combat controllers, pararescue, combat weather operators, and tactical air control parties to perform their mission and communicate beyond line of site (BLOS) with rear echelon C2, in order to provide a joint operating picture. The ST operators use this equipment to gather and transmit assault zone suitability and weather data and to perform tactical airfield/assault landing/drop zone operations. Moreover, items include but not limited to training, initial spares, repairs and returns, and ot

PE 0408011F BATTLEFIELD AIRMEN OPERATIONS (BAO) Kit

BATTLEFIELD AIRMEN OPERATIONS (BAO) Kit: FY18 funding will procure, test, support, and repair BAO Kit system of system components to optimize user information intake. Funding will be used to ensure interoperability to reduce the risk of fratricide, reduce the weight carried by individual Airmen, and reduce the time required to find, fix, track, target, and engage the enemy. The core capabilities included are but not restricted to: Human Machine Interface (HMI), Operational Control System (OCS), Line-of-Sight (LOS) targeting device, Non-Line of-Sight (XLOS) targeting device, and Machine-to-Machine C4ISR system. Also, BAO Kit items to include but not limited to individual training, initial spares, equipment repairs, and other logistical service.

- a. HUMAN MACHINE INTERFACE (HMI): FY18 funding will procure HMI components that will provide integrated operator interface between all the machine components by using unified visual and auditory displays and controls, such as head-mounted displays and tactical earplug connectivity with communications. This system provides optimized user information portrayal and control of peripheral devices, to include modernization of communications, computing devices, portable electrical power generation and management, targeting and situational awareness software (machine to machine) designed to reduce risk of fratricide and reduce the time required to employ precision effects on the battlefield to single-digit minutes.
- b. OPERATIONAL CONTROL SYSTEM (BAO KIT): FY18 funding will procure OCS. OCS is an integrated communication/display system comprised of a small wearable end user device, power and data management system, including integrated cabling and wireless data transmission that can readily connect and integrate all Battlefield Airmen Operations (BAO) Kit peripherals and portable power sources. The OCS system is a light weight, modular, plate carrier adaptable, integrated, easily configurable system that provides precise situational awareness, moving maps, and the ability to perform digitally-aided CAS targeting for all Battlefield Airmen and Special Operations Forces. The OCS is consumable with a lifespan of two years. OCS is upgraded every two years providing more durable hardware, reduced size and weight, and additional capability to the operator.

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|---|---|---|-----------------------------|--|--|--|--|
| Exhibit P-40, Budget Line Item Justification  | on: FY 2018 Air Force   |   |                             | Date: May 2017   |  |  |  |
| Appropriation / Budget Activity / Budget \$3080F: Other Procurement, Air Force / BA 03 Equip / BSA 7: Organization and Base   |   | P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment |                             |  |  |  |  |
| ID Code (A=Service Ready, B=Not Service Ready): A   | Program Elements for Code B It  | ems: N/A  | Other Related               | Program Elements: 0207422F, 0207444F, 0503133F           |  |  |  |
| Line Item MDAP/MAIS Code: N/A  c. LINE OF SIGHT (LOS): FY18 funding will procure LC airmen with the ability to geo-locate targets in both eye AFSOC TAC C2 program purchases of XLOS targeting data and to perform tactical airfield/assault landing drop | -safe and non-eye safe spectrums. The modernize<br>devices that are essential for combat weather op | ation of this equipment will s                                | significantly reduce the we | eight carried by the operator. Funding will also support |  |  |  |
| Items requested in FY18 as identified on the P-5 Exhibit mission requirements.  | it are representative of items to be procured. Items  | s procured during execution                                   | n may change based on cr    | itical equipment needed to support current Air Force     |  |  |  |
| Combat Rescue - Pararescue (AFR) PE 0503133F - P-PE 0503133F: COMBAT RESCUE - PARARESCUE (A   |   |   |                             |  |  |  |  |
| No FY18 funding requested.  |   |   |                             |  |  |  |  |
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LI 837100 - Tactical C-E Equipment Air Force

|  |                            |                           |                |                     |                      |                | U                   | NCLASS                  | DIFIEL         | <b>'</b>            |                      |                |                     |                      |                          |                     |                      |                |
|--|----------------------------|---------------------------|----------------|---------------------|----------------------|----------------|---------------------|-------------------------|----------------|---------------------|----------------------|----------------|---------------------|----------------------|--------------------------|---------------------|----------------------|----------------|
| Exhibit P-5, Cost  | <b>Analysis</b>            | FY 20                     | 18 Air F       | orce                |                      |                |                     |                         |                |                     |                      |                |                     | Date: N              | /lay 2017                |                     |                      |                |
| <b>Appropriation / B</b> 3080F / 03 / 7                    | udget A                    | ctivity /                 | Budget         | Sub Acti            | vity:                |                |                     | n Number<br>tical C-E E |                |                     |                      |                |                     |                      | umber / T<br>ical Airbor |                     |                      | ems            |
| ID Code (A=Service Read                                    | dy, B=Not Servi            | ce Ready):                | 4              |                     |                      |                |                     |                         | М              | DAP/MAIS            | Code:                |                |                     |                      |                          |                     |                      |                |
| F  | Resource                   | Summa                     | ary            |                     | F                    | Prior Yea      | ars                 | FY 20                   | 16             | FY                  | 2017                 | FY 2           | 018 Ba              | se F                 | Y 2018 C                 | СО                  | FY 2018              | Total          |
| Procurement Quantity (Un                                   | its in Each)               |                           |                |                     |                      |                | -                   |                         | 23             |                     |                      | 1              |                     | -                    |                          | -                   |                      |                |
| Gross/Weapon System Co                                     | ost (\$ in Million         | s)                        |                |                     |                      |                | -                   |                         | 43.187         |                     | 15.599               | 9              |                     | 1.192                |                          | 0.000               |                      | 1.19           |
| Less PY Advance Procure                                    | ement (\$ in Mil.          | lions)                    |                |                     |                      |                | -                   |                         | -              |                     | -                    |                |                     | -                    |                          | -                   |                      | -              |
| Net Procurement (P-1) (\$                                  | in Millions)               |                           |                |                     |                      |                | -                   |                         | 43.187         |                     | 15.599               | 9              |                     | 1.192                |                          | 0.000               |                      | 1.19           |
| Plus CY Advance Procure                                    | ment (\$ in Mill           | ions)                     |                |                     |                      |                | -                   |                         | -              |                     | -                    |                |                     | -                    |                          | -                   |                      | -              |
| Total Obligation Authori                                   | t <b>y</b> (\$ in Millions | :)                        |                |                     |                      |                | -                   |                         | 43.187         |                     | 15.599               | )              |                     | 1.192                |                          | 0.000               |                      | 1.19           |
| (T   | he following F             | Resource Su               | ımmary row     | s are for info      | rmational pu         | ırposes only   | y. The corres       | sponding budg           | et request     | s are docume        | ented elsewh         | ere.)          |                     |                      |                          |                     |                      |                |
| Initial Spares (\$ in Millions)                            |                            |                           |                |                     |                      |                | -                   |                         | -              |                     | -                    |                |                     | -                    |                          | -                   |                      | -              |
| Gross/Weapon System U                                      | nit Cost (\$ in N          | Millions)                 |                |                     |                      |                | -                   |                         | 1.878          |                     | 3.900                | )              |                     | -                    |                          | -                   |                      | -              |
|  |                            |                           |                |                     |                      |                |                     |                         |                |                     |                      |                |                     |                      | -                        |                     |                      |                |
| Note: Subtotals or Totals i                                | _                          | P-5 may no<br>Prior Years |                |                     | due to roui          | nding.         |                     | FY 2017                 |                | EV                  | ′ 2018 Base          |                |                     | Y 2018 O             | 00                       |                     | / 2018 Tota          | <u> </u>       |
|  |                            |                           | Total          |                     |                      | Total          |                     |                         | Total          |                     |                      | Total          |                     |                      | Total                    |                     |                      | Total          |
| Cost Elements  | Unit Cost<br>(\$ M)        | <b>Qty</b><br>(Each)      | Cost<br>(\$ M) | Unit Cost<br>(\$ M) | <b>Qty</b><br>(Each) | Cost<br>(\$ M) | Unit Cost<br>(\$ M) | Qty<br>(Each)           | Cost<br>(\$ M) | Unit Cost<br>(\$ M) | <b>Qty</b><br>(Each) | Cost<br>(\$ M) | Unit Cost<br>(\$ M) | <b>Qty</b><br>(Each) | Cost<br>(\$ M)           | Unit Cost<br>(\$ M) | <b>Qty</b><br>(Each) | Cost<br>(\$ M) |
| Hardware - 0207418F Cost                                   |                            |                           |                | '                   |                      |                |                     |                         |                |                     |                      |                |                     |                      |                          |                     |                      |                |
| Recurring Cost   |                            |                           |                |                     |                      |                |                     |                         |                |                     |                      |                |                     |                      |                          |                     |                      |                |
| TACP Fixed<br>Simulators - JTC TRS                         | -                          | -                         | -              | 1.265               | 23                   | 29.095         | 1.962               | 4                       | 7.846          | -                   | -                    | 0.000          | -                   | -                    | 0.000                    | -                   | -                    | 0.00           |
| Subtotal: Recurring Cost                                   | -                          | -                         | -              | -                   | -                    | 29.095         | -                   | -                       | 7.846          | -                   | -                    | 0.000          | -                   | -                    | 0.000                    | -                   | -                    | 0.00           |
| Subtotal: Hardware -<br>0207418F Cost                      | -                          | -                         | -              | -                   | -                    | 29.095         | -                   | -                       | 7.846          | -                   | -                    | 0.000          | -                   | -                    | 0.000                    | -                   | -                    | 0.00           |
| Support - 0207418F Cost                                    |                            |                           |                |                     |                      |                |                     |                         |                |                     |                      |                |                     |                      |                          |                     |                      |                |
| PMA - Contractor<br>Services and other<br>Government Costs | -                          | -                         | -              | -                   | -                    | 2.093          | -                   | -                       | 1.160          | 1.192               | 1                    | 1.192          | -                   | -                    | 0.000                    | 1.192               | 1                    | 1.19           |
| Relocatable Shelters                                       | -                          | -                         | -              | -                   | -                    | 5.462          | -                   | -                       | 5.629          | -                   | -                    | 0.000          | -                   | -                    | -                        | -                   | -                    | 0.00           |
| Contractor PM & Cyber Support                              | -                          | -                         | -              | -                   | -                    | -              | -                   | -                       | 0.964          | -                   | -                    | -              | -                   | -                    | -                        | -                   | -                    | -              |
| Realignment to BA SPO                                      | -                          | -                         | -              | -                   | -                    | 6.537          | -                   | -                       | -              | -                   | -                    | -              | -                   | -                    | -                        | -                   | -                    | -              |
| Subtotal: Support -<br>0207418F Cost                       | -                          |                           | -              | -                   | -                    | 14.092         | -                   | -                       | 7.753          | -                   | -                    | 1.192          |                     | -                    | 0.000                    | -                   | -                    | 1.19           |
| Gross/Weapon System Cost                                   | -                          | -                         | -              | 1.878               | 23                   | 43.187         | 3.900               | 4                       | 15.599         | -                   | -                    | 1.192          | -                   | -                    | 0.000                    | -                   | -                    | 1.19           |
|  |                            |                           |                |                     |                      |                |                     |                         |                |                     |                      | FY 20          | 18                  |                      | FY 2018                  |                     | FY 201               | 18             |
|  | Sec                        | ondary Di                 | stribution     | 1                   |                      |                | FY                  | 2016                    |                | FY 2017             |                      | Base           |                     |                      | осо                      |                     | Total                |                |
| AF   |                            | Qua                       | •              |                     |                      |                |                     | 2                       |                |                     | 4                    |                |                     | 0                    |                          | 0                   |                      |                |
|  |                            |                           | I Obligation A |                     |                      |                |                     | 43.18                   |                |                     | 15.599               |                | 1.19                |                      |                          | 0.000               |                      | 1.19           |

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| Exhibit P-5, Cost Analysis: FY 2018 Air Force                         |  |                |         | <b>Date:</b> May 2017                            |         |
|---|--|----------------|---------|--|---------|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7 | <b>P-1 Line Item Number / </b> 837100 / Tactical C-E Equ |                |         | Item Number / Title  <br>- / Tactical Airborne C | •       |
| ID Code (A=Service Ready, B=Not Service Ready) : A                    |  | MDAP/MAIS Code | ):      |  |         |
|   |  |                | FY 2018 | FY 2018  | FY 2018 |

| ID Code (A=Service Ready, B=Not | t Service Ready) : A              |         | MDAP/MAIS Code: |                 |                |                  |  |  |  |
|---------------------------------|-----------------------------------|---------|-----------------|-----------------|----------------|------------------|--|--|--|
|                                 | Secondary Distribution            | FY 2016 | FY 2017         | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |  |  |  |
| Total:                          | Quantity                          | 23      | 4               | -               | -              | -                |  |  |  |
| Secondary Distribution          | <b>Total Obligation Authority</b> | 43.187  | 15.599          | 1.192           | 0.000          | 1.192            |  |  |  |
|                                 |                                   |         |                 |                 |                |                  |  |  |  |
|                                 |                                   |         |                 |                 |                |                  |  |  |  |
|                                 |                                   |         |                 |                 |                |                  |  |  |  |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 03 / 7

837100 / Tactical C-E Equipment

**Aggregated Items Title:** Deployable C3 Systems

| 00001 7 007 7  |      |                       |           |               |                         |           | •             |                         | ractical  | O91           | p                       |           |               |                         |           | 00.000        | .0 00 0,                |  |               |                         |
|--|------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|--|---------------|-------------------------|
|  |      |                       | P         | rior Years    | S                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | FY        | / 2018 OC     | 0                       | FY   | 2018 Tot      | al                      |
|  | ID   | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost                                      | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware, Recurring                                  |      |                       | , ,       | , ,           | . ,                     | . ,       | , ,           |                         |           | . ,           |                         |           | , , ,         |                         |           |               | . ,                     | , , ,  |               |                         |
| TDC - Integrated<br>Communications<br>Access Package | А    |                       | -         | -             | -                       | 0.171     | 88            | 15.030                  | 0.233     | 93            | 21.661                  | 0.280     | 104           | 29.129                  | -         | -             | 0.000                   | 0.280  | 104           | 29.12                   |
| Secondary Distribution                               |      |                       | ,         |               |                         |           |               |                         |           |               |                         |           | ·             |                         |           |               |                         |  |               |                         |
| AF   |      |                       |           | -             | -                       |           | 44            | 7.515                   |           | 49            | 11.413                  |           | 55            | 15.405                  |           | -             | 0.000                   |  | 55            | 15.40                   |
| AFNG   |      |                       |           | -             | -                       |           | 37            | 6.319                   |           | 37            | 8.618                   |           | 41            | 11.483                  |           | -             | 0.000                   |  | 41            | 11.48                   |
| AFR  |      |                       |           | -             | -                       |           | 7             | 1.196                   |           | 7             | 1.630                   |           | 8             | 2.241                   |           | -             | 0.000                   |  | 8             | 2.24                    |
| TDC - Network<br>Control Center -<br>Deployed        | А    |                       | -         | -             | -                       | 0.008     | 61            | 0.490                   | 0.116     | 61            | 7.076                   | 0.017     | 61            | 1.058                   | -         | -             | 0.000                   | 0.017  | 61            | 1.05                    |
| Secondary Distribution                               |      |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |  |               |                         |
| AF   |      |                       |           | -             | -                       |           | 31            | 0.249                   |           | 31            | 3.596                   |           | 31            | 0.538                   |           | -             | 0.000                   |  | 31            | 0.53                    |
| AFNG   |      |                       |           | -             | -                       |           | 27            | 0.217                   |           | 27            | 3.132                   |           | 27            | 0.468                   |           | -             | 0.000                   |  | 27            | 0.46                    |
| AFR  |      |                       |           | -             | -                       |           | 3             | 0.024                   |           | 3             | 0.348                   |           | 3             | 0.052                   |           | -             | 0.000                   |  | 3             | 0.05                    |
| TDC - Hub and Spoke<br>Satellite Terminals           | Α    |                       | -         | -             | -                       | 0.000     | 51            | 0.000                   | 0.002     | 51            | 0.109                   | 0.480     | 51            | 24.492                  | -         | -             | 0.000                   | 0.480  | 51            | 24.49                   |
| Secondary Distribution                               |      |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |  |               |                         |
| AF   |      |                       |           | -             | -                       |           | 17            | 0.000                   |           | 17            | 0.036                   |           | 17            | 8.164                   |           | -             | 0.000                   |  | 17            | 8.16                    |
| AFNG   |      |                       |           | -             | -                       |           | 27            | 0.000                   |           | 27            | 0.058                   |           | 27            | 12.966                  |           | -             | 0.000                   |  | 27            | 12.96                   |
| AFR  |      |                       |           | -             | -                       |           | 7             | 0.000                   |           | 7             | 0.015                   |           | 7             | 3.362                   |           | -             | 0.000                   |  | 7             | 3.36                    |
| Subtotal: Hardware, Recur                            | ring |                       | -         | -             | -                       | -         | -             | 15.520                  | -         | -             | 28.846                  | -         | -             | 54.679                  | -         |               | 0.000                   | -  | -             | 54.67                   |
| Services   |      |                       |           |               |                         |           | ,             |                         |           |               |                         | ,         | ,             |                         |           |               |                         | <u>,                                      </u> | ·             |                         |
| TDC - PSC Contractor<br>Services                     | А    |                       | -         | -             | -                       | -         | -             | 1.156                   | -         | -             | 1.410                   | -         | -             | 1.480                   | -         | -             | 0.000                   | -  | -             | 1.48                    |
| Secondary Distribution                               |      |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |  | ·             |                         |
| AF   |      |                       |           | -             | -                       |           | -             | 1.156                   |           | -             | 1.410                   |           | -             | 1.480                   |           | -             | 0.000                   |  | -             | 1.48                    |
| TDC - PSC Other<br>Government Costs                  | Α    |                       | -         | -             | -                       | -         | -             | 0.674                   | -         | -             | 0.228                   | -         | -             | 0.762                   | -         | -             | 0.000                   | -  | -             | 0.76                    |
| Secondary Distribution                               |      |                       | ,         |               |                         | •         |               |                         |           | ,             |                         |           | ,             |                         |           |               |                         | •  |               |                         |
| AF   |      |                       |           | -             | -                       |           | -             | 0.674                   |           | -             | 0.228                   |           | -             | 0.762                   |           | -             | 0.000                   |  | -             | 0.76                    |
| Subtotal: Services                                   |      |                       | -         | -             | -                       | -         | -             | 1.830                   | -         | -             | 1.638                   | -         | -             | 2.242                   | -         | -             | 0.000                   | -  | -             | 2.24                    |
| Total  |      |                       | -         | -             | -                       | -         | -             | 17.350                  | -         | -             | 30.484                  | -         | -             | 56.921                  | -         | -             | 0.000                   | -  | -             | 56.92                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

a. FY18 INTEGRATED COMMUNICATIONS ACCESS PACKAGE (ICAP):

Unit cost increased resulting in quantity reduction by 1.

b. CONTROLLED ITEM will be funded with investment funds to purchase military communications equipment classified as critical protection items.

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| Exhibit P-40a, Budget Item Justification For Aggregated   | Items: FY 2018 Air Force  | <b>Date</b> : May 2017  |
|---|---|---|
| Appropriation / Budget Activity / Budget Sub Activity:  | P-1 Line Item Number / Title:   | Aggregated Items Title:   |
| 3080F / 03 / 7  | 837100 / Tactical C-E Equipment   | Deployable C3 Systems   |
| c. PROGRAM SUPPORT COSTS (PSC):   |   |   |
| PSC for Theater Deployable Communications supports the operation of the program of  | office in its management and oversight role, to include engineering and tec | chnical support, as well as support activities for the program.                   |
| d. DIRECT MISSION SUPPORT (DMS):  |   |   |
| DMS for TDC includes all support associated with equipment installation, engineering meetings, and events associated with fielding both hardware and software products, a |   | This includes the initial bed down and operability testing, technical interchange |
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Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 7

Date: May 2017

Item Number / Title [DODIC]:
- / Advanced Communications Systems

MDAP/MAIS Code:

| 12 2 2 2 (r como ready, 2 not como ready) 1 r          |                            |                           |                           |              |             |               |  |  |  |  |
|--|----------------------------|---------------------------|---------------------------|--------------|-------------|---------------|--|--|--|--|
| Resource Summary                                       | Prior Years                | FY 2016                   | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |  |  |  |  |
| Procurement Quantity (Units in Each)                   | -                          | 604                       | 619                       | 392          | -           | 392           |  |  |  |  |
| Gross/Weapon System Cost (\$ in Millions)              | -                          | 9.933                     | 10.397                    | 6.485        | 0.000       | 6.485         |  |  |  |  |
| Less PY Advance Procurement (\$ in Millions)           | -                          | -                         | -                         | -            | -           | -             |  |  |  |  |
| Net Procurement (P-1) (\$ in Millions)                 | -                          | 9.933                     | 10.397                    | 6.485        | 0.000       | 6.485         |  |  |  |  |
| Plus CY Advance Procurement (\$ in Millions)           | -                          | -                         | -                         | -            | -           | -             |  |  |  |  |
| Total Obligation Authority (\$ in Millions)            | -                          | 9.933                     | 10.397                    | 6.485        | 0.000       | 6.485         |  |  |  |  |
| (The following Resource Summary rows are for informati | onal purposes only. The co | responding budget request | s are documented elsewher | re.)         |             |               |  |  |  |  |
| Initial Spares (\$ in Millions)                        | -                          | -                         | -                         | -            | -           | -             |  |  |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions)         | -                          | 0.016                     | 0.017                     | 0.017        | -           | 0.017         |  |  |  |  |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | T .       |               |                         | 1         |               |                         | 1         |                      |                         |              |               |                         |             |               |                         |           |               |                         |
|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|--------------|---------------|-------------------------|-------------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |           | Prior Years   | S                       |           | FY 2016       |                         | FY 2017   |                      |                         | FY 2018 Base |               |                         | FY 2018 OCO |               |                         | FY        | ' 2018 Tot    | al                      |
| Cost Elements                                | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Software - 0207423F Cost                     |           |               |                         |           |               |                         |           |                      |                         |              |               |                         |             |               |                         |           |               |                         |
| Recurring Cost                               | _         |               |                         |           |               |                         |           |                      |                         |              |               |                         |             |               |                         |           |               |                         |
| MUOS   | -         | -             | -                       | 0.016     | 604           | 9.661                   | 0.016     | 619                  | 9.915                   | 0.016        | 392           | 6.274                   | -           | -             | -                       | 0.016     | 392           | 6.274                   |
| Subtotal: Recurring Cost                     | -         | -             | -                       | -         | -             | 9.661                   | -         | -                    | 9.915                   | -            | -             | 6.274                   | -           | -             | -                       | -         | -             | 6.274                   |
| Subtotal: Software -<br>0207423F Cost        | -         | -             | -                       | -         | -             | 9.661                   | -         | -                    | 9.915                   | -            | -             | 6.274                   | -           | -             | -                       | -         | -             | 6.274                   |
| Support - Support End Item C                 | Cost      |               |                         |           |               |                         |           |                      |                         |              |               |                         |             |               |                         |           |               |                         |
| PMA Contractor Services                      | -         | -             | -                       | -         | -             | 0.157                   | -         | -                    | 0.200                   | -            | -             | 0.054                   | -           | -             | -                       | -         | -             | 0.054                   |
| PMA Other Government<br>Costs                | -         | -             | -                       | -         | -             | 0.115                   | -         | -                    | 0.282                   | -            | -             | 0.157                   | -           | -             | -                       | -         | -             | 0.157                   |
| Subtotal: Support - Support<br>End Item Cost | -         | -             | _                       | -         | -             | 0.272                   | -         | -                    | 0.482                   | -            | -             | 0.211                   | -           | -             | -                       | -         | -             | 0.211                   |
| Gross/Weapon System<br>Cost                  | -         | -             | -                       | 0.016     | 604           | 9.933                   | 0.017     | 619                  | 10.397                  | 0.017        | 392           | 6.485                   | -           | -             | 0.000                   | 0.017     | 392           | 6.485                   |

### Remarks:

- a. Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items
- b. Program Support Costs: Program Support Costs supports AF JTRS program with Engineering and technical support, as well as, support activities for the program.

| Secondar | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|----------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF       | Quantity                   | 604     | 619     | 392             | -              | 392              |
|          | Total Obligation Authority | 9.933   | 10.397  | 6.485           | -              | 6.485            |
| Total:   | Quantity                   | 604     | 619     | 392             | -              | 392              |

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ID Code (A=Service Ready, B=Not Service Ready) : A

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|  |                                     | UNCLASSIFI  | IED             |                 |  |                  |  |  |  |  |  |
|--|-------------------------------------|---|-----------------|-----------------|--|------------------|--|--|--|--|--|
| Exhibit P-5, Cost An                   | alysis: FY 2018 Air Force           | ]   | Date: May 2017  |                 |  |                  |  |  |  |  |  |
| Appropriation / Budg<br>3080F / 03 / 7 | get Activity / Budget Sub Activity: | P-1 Line Item Number / Ti<br>837100 / Tactical C-E Equi |                 | l -             | Item Number / Title [DODIC]: - / Advanced Communications Systems |                  |  |  |  |  |  |
| ID Code (A=Service Ready, B=           | Not Service Ready):A                |   | MDAP/MAIS Code: | 1               |  |                  |  |  |  |  |  |
|  | Secondary Distribution              | FY 2016   | FY 2017         | FY 2018<br>Base | FY 2018<br>OCO   | FY 2018<br>Total |  |  |  |  |  |
| Secondary Distribution                 | Total Obligation Authority          | 9.933   | 10.397          | 6.485           | 0.000  | 6.48             |  |  |  |  |  |
|  |                                     |   |                 |                 |  |                  |  |  |  |  |  |
|  |                                     |   |                 |                 |  |                  |  |  |  |  |  |
|  |                                     |   |                 |                 |  |                  |  |  |  |  |  |
|  |                                     |   |                 |                 |  |                  |  |  |  |  |  |
|  |                                     |   |                 |                 |  |                  |  |  |  |  |  |

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Exhibit P-5, Cost Analysis: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: 3080F / 03 / 7 837100 / Tactical C-E Equipment - I Tactical Air Control Party-Mod ID Code (A=Service Ready, B=Not Service Ready) : A MDAP/MAIS Code: **FY 2016 FY 2018 Base Resource Summary Prior Years** FY 2017 **FY 2018 OCO** FY 2018 Total Procurement Quantity (Units in Each) 2.237 128 693 Gross/Weapon System Cost (\$ in Millions) 33.327 41.823 43.084 0.000 43.084 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 33.327 41.823 43.084 0.000 43.084 \_ Plus CY Advance Procurement (\$ in Millions) \_ Total Obligation Authority (\$ in Millions) 33.327 41.823 43.084 0.000 43.084 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) \_ Gross/Weapon System Unit Cost (\$ in Millions) 0.015 0.327 0.062 0.062 \_ Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. **Prior Years** FY 2016 FY 2017 **FY 2018 Base FY 2018 OCO** FY 2018 Total Total Total Total Total Total Total **Unit Cost Unit Cost** Qty Cost **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty Qty Cost Cost Cost Cost Cost **Cost Elements** (\$ M) (Each) (\$ M) (\$ M) (Each) (Each) (\$ M) (Each) (Each) (\$ M) (Each) (\$ M) Hardware - Hardware End Item Cost Recurring Cost DISMOUNTED 485 0.009 1,033 9.301 0.000 0.023 0.000 485 11.065 0.023 11.065 EQUIPMENT AD(†) DISMOUNTED 0.009 548 4.932 0.000 0.023 162 3.726 0.023 162 3.726 **EQUIPMENT ANG** CASS 145 (Service 1.465 1.242 1.242 1.465 1.558 1.558 1.558 1.558 Packs) **TACP** TRANSPORTABLE 0.135 0.270 0.135 0.135 0.136 27 3.672 0.136 27 3.672 GATEWAY (TTG) MOBILE COMMUNICATIONS 0.212 36 7.632 0.218 118 25.704 0.000 0.000 SYSTEMS (MCS) **FUTURE MOBILE** COMMUNICATIONS 0.653 9 5.877 0.653 5.877 SYSTEMS (MCS 2) **BA-DASS SW** 0.662 0.662 INTEGRATION Subtotal: Recurring Cost 23.377 27.966 25.898 0.000 25.898 --Subtotal: Hardware -23.377 27.966 25.898 0.000 25.898 Hardware End Item Cost Hardware - 0207444F Cost Non Recurring Cost

LI 837100 - Tactical C-E Equipment Air Force

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P-1 Line #44

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

Date: May 2017

Item Number / Title [DODIC]:

- / Tactical Air Control Party-Mod

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | F         | rior Years    | 3                       | FY 2016   |               |                         | FY 2017   |                      |                         | F         | / 2018 Ba            | se                      | FY 2018 OCO |               |                         | F         | Y 2018 Tota          | al                      |
|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-------------|---------------|-------------------------|-----------|----------------------|-------------------------|
| Cost Elements                                      | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| MOBILE<br>COMMUNICATIONS<br>SYSTEMS (MCS)          | -         | -             | -                       | 1.853     | 1             | 1.853                   | 4.989     | 1                    | 4.989                   | 3.738     | 1                    | 3.738                   | -           | -             | 0.000                   | 3.738     | 1                    | 3.73                    |
| TACTICAL<br>TRANSPORTABLE<br>GATEWAY (TTG)         | -         | -             | -                       | 1.630     | 1             | 1.630                   | 1.101     | 1                    | 1.101                   | 2.732     | 1                    | 2.732                   | -           | -             | -                       | 2.732     | 1                    | 2.73                    |
| FUTURE MOBILE<br>COMMUNICATIONS<br>SYSTEMS (MCS 2) | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       | 2.546     | 1                    | 2.546                   | -           | -             | -                       | 2.546     | 1                    | 2.54                    |
| Subtotal: Non Recurring<br>Cost                    | -         | -             | -                       | -         | -             | 3.483                   | -         | -                    | 6.090                   | -         | -                    | 9.016                   | -           | -             | 0.000                   | -         | -                    | 9.01                    |
| Subtotal: Hardware -<br>0207444F Cost              | -         | -             | -                       | -         | -             | 3.483                   | -         | -                    | 6.090                   | -         | -                    | 9.016                   | -           | -             | 0.000                   | -         | -                    | 9.01                    |
| Support - 0207444F Cost                            |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |             |               |                         |           |                      |                         |
| FULL MOTION VIDEO<br>RECEIVER ICS                  | -         | -             | -                       | 0.068     | 1             | 0.068                   | -         | -                    | 0.000                   | -         | -                    | -                       | -           | -             | -                       | -         | -                    | -                       |
| OPERATIONAL<br>CONTROL SYSTEM ICS<br>AD            | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                    | -                       | -           | -             | -                       | -         | -                    | -                       |
| OPERATIONAL<br>CONTROL SYSTEM ICS<br>ANG           | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                    | -                       | -           | -             | -                       | -         | -                    | -                       |
| CRANE SUPPORT                                      | -         | -             | -                       | 2.667     | 1             | 2.667                   | 3.410     | 1                    | 3.410                   | 3.410     | 1                    | 3.410                   | -           | -             | 0.000                   | 3.410     | 1                    | 3.41                    |
| PMA CONTRACTOR<br>SERVICES                         | -         | -             | -                       | 2.503     | 1             | 2.503                   | 3.140     | 1                    | 3.140                   | 3.244     | 1                    | 3.244                   | -           | -             | -                       | 3.244     | 1                    | 3.24                    |
| PMA OTHER GOV'T<br>COSTS                           | -         | -             | -                       | 0.704     | 1             | 0.704                   | 0.311     | 1                    | 0.311                   | 0.372     | 1                    | 0.372                   | -           | -             | -                       | 0.372     | 1                    | 0.37                    |
| MCS ICS  | -         | -             | -                       | -         | -             | 0.000                   | 0.305     | 1                    | 0.305                   | 0.224     | 1                    | 0.224                   | -           | -             | -                       | 0.224     | 1                    | 0.22                    |
| TTG ICS  | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | 0.155     | 1                    | 0.155                   | -           | -             | -                       | 0.155     | 1                    | 0.15                    |
| TARGETING DEVICES ICS                              | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                    | -                       | -           | -             | -                       | -         | -                    | -                       |
| TEST SUPPORT                                       | -         | -             | -                       | 0.525     | 1             | 0.525                   | 0.601     | 1                    | 0.601                   | 0.765     | 1                    | 0.765                   | -           | -             | -                       | 0.765     | 1                    | 0.76                    |
| Subtotal: Support -<br>0207444F Cost               | -         | -             | -                       | -         | -             | 6.467                   | -         | -                    | 7.767                   | -         | -                    | 8.170                   | -           | -             | 0.000                   | -         | -                    | 8.17                    |
| Gross/Weapon System<br>Cost                        | -         | -             | -                       | 0.015     | 2,237         | 33.327                  | 0.327     | 128                  | 41.823                  | 0.062     | 693                  | 43.084                  | -           | -             | 0.000                   | 0.062     | 693                  | 43.08                   |

|    | Secondary Distribution | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|----|------------------------|---------|---------|-----------------|----------------|------------------|
| AF | Quantity               | 1,689   | 128     | 531             | -              | 531              |

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P-1 Line #44

| Exhibit P-5, Cost Analysis: FY 2018 Air Force          |                                 | Date: May 2017                     |
|--|---------------------------------|------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity: | P-1 Line Item Number / Title:   | Item Number / Title [DODIC]:       |
| 3080F / 03 / 7   | 837100 / Tactical C-E Equipment | - / Tactical Air Control Party-Mod |

| ID Code (A=Service Ready, B=Not Service Read | dy): A                     |         | MDAP/MAIS Code | :               |                |                  |
|--|----------------------------|---------|----------------|-----------------|----------------|------------------|
| Secondar                                     | y Distribution             | FY 2016 | FY 2017        | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|  | Total Obligation Authority | 28.395  | 41.823         | 39.358          | 0.000          | 39.358           |
| AFNG   | Quantity                   | 548     | -              | 162             | -              | 162              |
|  | Total Obligation Authority | 4.932   | 0.000          | 3.726           | -              | 3.726            |
| Total:                                       | Quantity                   | 2,237   | 128            | 693             | •              | 693              |
| Secondary Distribution                       | Total Obligation Authority | 33.327  | 41.823         | 43.084          | 0.000          | 43.084           |

<sup>(†)</sup> indicates the presence of a P-5a

| Exhibit P-5a, Procurement History and Planning: FY 2018 A | ir Force                        | Date: May 2017                     |
|---|---------------------------------|------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:    | P-1 Line Item Number / Title:   | Item Number / Title [DODIC]:       |
| 3080F / 03 / 7  | 837100 / Tactical C-E Equipment | - / Tactical Air Control Party-Mod |

| Cost Elements              | 0<br>C<br>0 | FY   | Contractor and Location                  | Method/Type<br>or<br>Funding Vehicle | Location of PCO                | Award<br>Date | Date<br>of First<br>Delivery | Qty<br>(Each) | Unit Cost | Specs<br>Avail<br>Now? | Date<br>Revision<br>Available | RFP Issue<br>Date |
|----------------------------|-------------|------|--|--------------------------------------|--------------------------------|---------------|------------------------------|---------------|-----------|------------------------|-------------------------------|-------------------|
| DISMOUNTED EQUIPMENT AD(†) |             | 2016 | Rockwell Collins / Cedar Rapids, Iowa    | Various                              | AFLCMC Wright Patterson AFB    | Dec 2015      | Aug 2017                     | 1,033         | 0.009     | Y                      |                               |                   |
| DISMOUNTED EQUIPMENT AD(†) |             | 2018 | L3 Communications / Salt Lake City, Utah | Various                              | AFLCMC Wright<br>Patterson AFB | Nov 2017      | Nov 2018                     | 485           | 0.023     | Y                      |                               |                   |

<sup>(†)</sup> indicates the presence of a P-21

#### Remarks:

TTG Contract awarded 2nd Qtr FY17 and MCS Contract awarded 2nd Qtr FY16.

Dismounted unit costs fluctuate based on equipment types purchased.

Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items.

| E   | xh | ibi | t P  | -21, Pr                 | oduct               | ion Sc                       | hedu                         | le: F\      | 201         | 8 Air       | Force       |             |             |                              |             |             |             |             |             |             |             |             |             |             | Date        | e: Ma       | y 201       | 7      |                 |                 |             |                  |
|-----|----|-----|------|-------------------------|---------------------|------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|-----------------|-----------------|-------------|------------------|
|     |    |     |      | <b>ation</b> /<br>3 / 7 | Budg                | et Acti                      | vity /                       | Budg        | get Si      | ub Ac       | tivity      | :           | 1 -         | <b>Line</b><br>7100 <i>l</i> |             |             |             |             |             |             |             |             |             |             |             |             |             |        | [DOD<br>ol Part | DIC]:<br>ty-Mod | t           |                  |
|     |    |     |      |                         | lements<br>in Each) |                              |                              |             |             |             |             |             | Fiscal      | ear 2016                     |             |             |             |             |             |             |             |             |             |             | Fiscal Y    | ear 2017    |             |        |                 |                 |             | В                |
|     |    |     |      |                         |                     | ACCEPT                       |                              |             |             | _           |             |             |             |                              | (           | Calendar    | Year 20     | 16          |             |             |             |             |             |             |             | Caler       | ıdar Yeaı   | 2017   |                 |                 |             | L                |
| 0 0 | R  | F   | Y    | SERVICE                 | PROC<br>QTY         | PRIOR<br>TO 1<br>OCT<br>2015 | BAL<br>DUE<br>AS OF<br>1 OCT | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R                  | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J      | J<br>U<br>L     | A<br>U<br>G     | S<br>E<br>P | A<br>N<br>C<br>E |
| DI  | SM | OUN | ITED | EQUIPMEN                | IT AD               |                              |                              |             |             |             |             |             |             | <u>'</u>                     |             |             |             |             |             |             |             |             |             |             | ,           |             |             |        |                 |                 |             |                  |
|     | 1  | 20  | 16   | AF                      | 1,033               | 0                            | 1,033                        |             |             | Α -         | -           | -           | -           | -                            | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | - '    | -               | 278             | 126         | 629              |
|     | 2  | 20  | 18   | AF                      | 485                 | 0                            | 485                          |             |             |             |             |             |             |                              | •           | •           |             |             |             |             |             |             |             |             | ,           |             |             |        |                 |                 |             | 485              |
|     |    | •   |      |                         |                     |                              |                              | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R                  | M<br>A<br>Y | J<br>U<br>N | J<br>L      | A<br>U<br>G | S<br>E<br>P | 0<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U | J<br>U<br>L     | A<br>U<br>G     | S<br>E<br>P |                  |

| E   | khi    | ibit        | P-2 | 21, Pro                | ducti       | on Sc                | hedu                | le: F\      | / 2018      | 3 Air F     | orce        |             |             |                      |             |             |             |             |             |             |             |             |             |             | Date        | : May       | / 201       | 7           |                        |                       |             |             |
|-----|--------|-------------|-----|------------------------|-------------|----------------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------|-----------------------|-------------|-------------|
|     | •      | rop<br>)F/  |     | tion / <b>E</b><br>/ 7 | Budge       | et Acti              | vity /              | Budg        | get Su      | ıb Ac       | tivity      |             |             | <b>Line</b><br>100 / |             |             |             |             |             |             |             |             |             |             |             |             |             |             | <b>[DOD</b><br>ol Part | I <b>C]:</b><br>y-Mod | t           |             |
|     |        |             |     | Cost Ele<br>(Units in  |             |                      |                     |             |             |             |             |             | Fiscal Y    | ear 2018             | 1           |             |             |             |             |             |             |             |             |             | Fiscal Ye   | ar 2019     |             |             |                        |                       |             | B<br>A      |
|     |        |             |     |                        |             | ACCEPT               |                     |             |             |             |             |             |             |                      | C           | Calendar    | Year 20     | 18          |             |             |             |             |             |             |             | Calen       | dar Year    | 2019        |                        |                       |             | L           |
| 0 0 | F<br>R | =>/         |     |                        | PROC        | PRIOR<br>TO 1<br>OCT | BAL<br>DUE<br>AS OF | 0           | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A      | A<br>P               | M<br>A      | J           | n<br>n      | A<br>U<br>G | S<br>E      | 0 0         | N<br>O<br>V | D<br>E<br>C | J<br>A      | F<br>E<br>B | M<br>A      | A<br>P      | M<br>A      | J<br>U      | J<br>U                 | A<br>U<br>G           | S<br>E<br>P | A<br>N<br>C |
|     | $\Box$ | FY<br>DUNTE |     | ERVICE<br>QUIPMEN      | QTY<br>T AD | 2017                 | 1 OCT               | <u> </u>    | _ v         | C           | N           | В           | R           | R                    | Υ           | N           | <u> </u>    | G           | P           | 1           | V           | C           | N           | В           | R           | R           | Y           | N           | L                      | G                     | Р           | E           |
|     | 1      | 2016        | AF  | :                      | 1,033       | 404                  | 629                 | 126         | 126         | 126         | 126         | 125         |             |                      |             |             |             |             |             |             |             |             |             |             |             |             |             |             |                        |                       |             | 0           |
|     | 2      | 2018        | AF  | :                      | 485         | 0                    | 485                 |             | Α -         | -           | -           | -           | -           | -                    | -           | -           | -           | -           | -           | -           | 44          | 44          | 44          | 44          | 44          | 44          | 44          | 44          | 44                     | 44                    | 45          | 0           |
|     |        |             | •   |                        |             |                      | ,                   | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R          | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L            | A<br>U<br>G           | S<br>E<br>P |             |

| Exhibit P-21, Production Schedule: FY 2018 Air Force   |                                 | Date: May 2017                     |
|--|---------------------------------|------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity: | P-1 Line Item Number / Title:   | Item Number / Title [DODIC]:       |
| 3080F / 03 / 7   | 837100 / Tactical C-E Equipment | - / Tactical Air Control Party-Mod |

|          |   | Produc       | tion Rates (Each / | Month)       |                       |                    |                   | Procurement Lea      | adtime (Months)       |                    |                   |                      |
|----------|---|--------------|--------------------|--------------|-----------------------|--------------------|-------------------|----------------------|-----------------------|--------------------|-------------------|----------------------|
| MFR      |   |              |                    |              | _                     | In                 | itial             |                      |                       | Red                | order             |                      |
| Ref<br># | Manufacturer<br>Name - Location             | MSR For 2018 | 1-8-5 For 2018     | MAX For 2018 | ALT<br>Prior to Oct 1 | ALT<br>After Oct 1 | Manufacturing PLT | Total<br>After Oct 1 | ALT<br>Prior to Oct 1 | ALT<br>After Oct 1 | Manufacturing PLT | Total<br>After Oct 1 |
|          | Rockwell Collins - Cedar<br>Rapids, Iowa    |              |                    |              | 0                     | (                  | 0                 | 0                    | C                     | 0                  | 0                 | 0                    |
| 2        | L3 Communications - Salt<br>Lake City, Utah |              |                    | 45           | 0                     | 2                  | 12                | 14                   | C                     | 0                  | 0                 | 0                    |

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3080F / 03 / 7837100 / Tactical C-E EquipmentAir Base Ground Defense

|                                      |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         | ' '       |                      |                         |           |                      |                         |
|--------------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|
|                                      |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017              |                         | F۱        | 2018 Ba       | se                      | FY        | / 2018 OC            | 0                       | FY        | ′ 2018 Tot           | al                      |
| Item Number /<br>Title [DODIC]       | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                        |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                      |                         |
| Tactical<br>Communications<br>Radios | A        |                       | -         | -             | -                       | -         | -             | 0.000                   | -         |                      | 4.500                   | -         | -             | 0.000                   | -         |                      | 0.000                   | -         | -                    | 0.000                   |
| Secondary Distribution               |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |                      |                         |           |                      |                         |
| AF                                   |          |                       |           | -             | -                       |           | -             | 0.000                   |           | -                    | 4.500                   |           | -             | 0.000                   |           | -                    | 0.000                   |           | -                    | 0.000                   |
| Subtotal: Uncategorized              |          |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 4.500                   | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   |
| Total                                |          |                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -                    | 4.500                   | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   |

**Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 3080F / 03 / 7 837100 / Tactical C-E Equipment - / Special Tactics / Combat Control

| ID Code (A=Service Ready, B=Not Service Ready) : A       |                             | М                         | DAP/MAIS Code:            |              |             |               |
|--|-----------------------------|---------------------------|---------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                   | FY 2017                   | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | 1,377                     | 2,158                     | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 31.107                    | 49.333                    | 15.524       | 0.000       | 15.524        |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 31.107                    | 49.333                    | 15.524       | 0.000       | 15.524        |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                         | -                         | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)              | -                           | 31.107                    | 49.333                    | 15.524       | 0.000       | 15.524        |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget request | s are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                         | -                         | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | 0.023                     | 0.023                     | -            | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|  | P         | rior Years    | ;                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Bas    | se                      | F۱        | / 2018 OC     | 0                       | FY        | / 2018 Tot    | al                      |
|--|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements                                  | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - Hardware End Ite                    | em Cost   |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Recurring Cost                                 |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| HUMAN MACHINE<br>INTERFACE                     | -         | -             | -                       | 0.007     | 1,043         | 7.301                   | 0.007     | 536           | 3.750                   | 0.021     | 351           | 7.379                   | -         | -             | 0.000                   | 0.021     | 351           | 7.37                    |
| OPERATIONAL<br>CONTROL SYSTEM<br>(BAO KIT)     | -         | -             | -                       | 0.015     | 120           | 1.810                   | 0.015     | 402           | 6.030                   | 0.020     | 294           | 5.880                   | -         | -             | -                       | 0.020     | 294           | 5.88                    |
| LINE OF SIGHT                                  | -         | -             | -                       | 0.023     | 408           | 9.470                   | 0.029     | 128           | 3.704                   | 0.040     | 10            | 0.395                   | -         | -             | -                       | 0.040     | 10            | 0.39                    |
| BAO KIT/VEHICLE<br>COMMS/MOBILE<br>GATEWAY     | -         | -             | -                       | 10.955    | 1             | 10.955                  | 34.200    | 1             | 34.200                  | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Subtotal: Recurring Cost                       | -         | -             | -                       | -         | -             | 29.536                  | -         | -             | 47.684                  | -         | -             | 13.654                  | -         | -             | 0.000                   | -         | -             | 13.65                   |
| Subtotal: Hardware -<br>Hardware End Item Cost | -         | -             | -                       | -         | -             | 29.536                  | -         | -             | 47.684                  | -         | -             | 13.654                  | -         | -             | 0.000                   | -         | -             | 13.65                   |
| Support - Support End Item C                   | Cost      |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               | ,                       |
| PMA CONTRACTOR<br>SERVICES                     | -         | -             | -                       | 1.000     | 1             | 1.000                   | 1.050     | 1             | 1.050                   | 1.100     | 1             | 1.100                   | -         | -             | -                       | 1.100     | 1             | 1.10                    |
| PMA OTHER<br>GOVERNMENT COSTS                  | -         | -             | -                       | 0.571     | 1             | 0.571                   | 0.599     | 1             | 0.599                   | 0.770     | 1             | 0.770                   | -         | -             | -                       | 0.770     | 1             | 0.77                    |
| Subtotal: Support - Support<br>End Item Cost   | -         | -             | -                       | -         | -             | 1.571                   | -         | -             | 1.649                   | -         | -             | 1.870                   | -         | -             | -                       | -         | -             | 1.87                    |
| Gross/Weapon System<br>Cost                    | -         | -             | -                       | 0.023     | 1,377         | 31.107                  | 0.023     | 2,158         | 49.333                  | -         | -             | 15.524                  | -         | -             | 0.000                   | -         | -             | 15.52                   |

### Remarks:

a. Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items.

| Exhibit P-5, Cost Analysis: FY 2018 Air Force          |                                 | Date: May 2017                       |
|--|---------------------------------|--------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity: | P-1 Line Item Number / Title:   | Item Number / Title [DODIC]:         |
| 3080F / 03 / 7   | 837100 / Tactical C-E Equipment | - / Special Tactics / Combat Control |

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

b. Program Management Administration (PMA): Cost support management with engineering and technical implementation. PMA supports Program TDC with Engineering, and technical support activities.

| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF                     | Quantity                   | 1,377   | 2,158   | -               | -              | -                |
|                        | Total Obligation Authority | 31.107  | 49.333  | 15.524          | 0.000          | 15.524           |
| Total:                 | Quantity                   | 1,377   | 2,158   | -               | -              | -                |
| Secondary Distribution | Total Obligation Authority | 31.107  | 49.333  | 15.524          | 0.000          | 15.524           |

| Exhibit P-40a, Budget Item Justification For Aggregat  | <b>Date</b> : May 2017          |                                  |
|--|---------------------------------|----------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity: | P-1 Line Item Number / Title:   | Aggregated Items Title:          |
| 3080F / 03 / 7   | 837100 / Tactical C-E Equipment | Combat Rescue - Pararescue (AFR) |

|                                |          |                       |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           | •             | ,                       |
|--------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
|                                |          |                       | P         | Prior Years   |                         |           | FY 2016              |                         |           | FY 2017              |                         | FY        | ′ 2018 Ba            | se                      | FY        | / 2018 OC            | 0                       | FY        | ' 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                  |          |                       |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |
| Combat Rescue-<br>Pararescue   | А        |                       | -         | -             | -                       | 4.065     | 1                    | 4.065                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   |
| Secondary Distribution         | 1        |                       |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF                             |          |                       |           | -             | -                       |           | 1                    | 4.065                   |           | -                    | 0.000                   |           | -                    | 0.000                   |           | -                    | 0.000                   |           | -             | 0.000                   |
| Subtotal: Uncategorized        |          |                       | -         | -             | -                       | -         | -                    | 4.065                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   |
| Total                          |          |                       | -         | -             | -                       | -         | -                    | 4.065                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   |



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837170 / Combat Survivor Evader Locater

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 1203176F

Other Related Program Elements: 0305176F

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |       |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|-------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 0.000            | 0.000             | 3.004            | 0.000            | 3.004          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 3.004 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Net Procurement (P-1) (\$ in Millions)         | -            | 0.000            | 0.000             | 3.004            | 0.000            | 3.004          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 3.004 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Total Obligation Authority (\$ in Millions)    | -            | 0.000            | 0.000             | 3.004            | 0.000            | 3.004          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 3.004 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |       |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | _     |

# **Description:**

The Combat Survivor Evader Locator (CSEL) System provides aircrews with end-to-end global satellite secure emergency communication capability during combat and peace-time flying operations. A hand held rescue radio is required as part of the mandatory aircrew survival gear. CSEL is the Joint Program of Record with the US Air Force as lead service. CSEL supports four of five Personnel Recovery Mission Phases; Report, Locate, Support, and Recover. Funding for this exhibit contained in PE 1203176F.

#### Justification:

This program is a new start.

Updates to the CSEL Enterprise (60K+ handheld radios and base stations) are being driven by: 1) An NSA Cryptographic Modernization mandate, and 2) the Ultra High Frequency Follow-On satellite constellation, which is at the end of life. FY18 includes \$3.004M for procurement and retrofit of the modernized hardware.



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837190 / Radio Equipment

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Line Item MDAP/MAIS Code: N/A

| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total  |
|--|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|--------|
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 8.400            | 16.266            | 15.736           | 0.000            | 15.736           | 14.127          | 14.379         | 14.637  | 14.902  | -              | 98.447 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -      |
| Net Procurement (P-1) (\$ in Millions)         | -              | 8.400            | 16.266            | 15.736           | 0.000            | 15.736           | 14.127          | 14.379         | 14.637  | 14.902  | -              | 98.447 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -      |
| Total Obligation Authority (\$ in Millions)    | -              | 8.400            | 16.266            | 15.736           | 0.000            | 15.736           | 14.127          | 14.379         | 14.637  | 14.902  | -              | 98.447 |
| (The following                                 | Resource Sum   | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |         |         |                |        |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | _      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -                | -                | -               | -              | -       | -       | -              | -      |

### **Description:**

This program procures and fields Scope Command High Frequency (HF) radio equipment, network infrastructure, and transmit/receive antennas for 13 strategically located ground stations worldwide. All hardware and software, including radios and antennas, is commercial-off-the-shelf (COTS) with the exception of the software that provides the military functionality required for the COTS equipment to operate as a HF radio system. This software is a COTS-based product that has been configured for the DoD to provide the unique capabilities required. The need for modern, robust, and dependable stations with beyond line of sight radio coverage has been identified to ensure HF radio communications is available in additional areas of interest to the United States.

High Frequency Global Communications System (HFGCS) is the only global, strategic high-power HF Command and Control (C2) network serving the Department of Defense (DoD). HFGCS consists of the two major components: the radio/ network infrastructure (Scope Command) and the antennas (Antenna Program Support) which communicate with mobile assets (aircraft, Navy ships, Coast Guard ships). HFGCS supports aircrews, ground forces, naval operations, and control stations and is the primary C2 resource for Air Mobility Command cargo and tanker aircraft. Additional customers include White House Communications Agency (WHCA), Defense Communications System HF Entry, US Navy High Command Network, and other US government agencies. HFGCS supports war plan dissemination and daily operational requirements for WHCA, Joint Chiefs of Staff (JCS), US Strategic Command, National Military Command Center's Emergency Action Message distribution, Special Air Mission communications, Nuclear Command, Control & Communications (NC3), Major Air Force Commands and Combatant Commanders. HFGCS provides radio connectivity to other governmental organizations such as the Civil Air Patrol, Federal Emergency Management Agency, Transportation Security Administration, and the State Department. The HFGCS network supports Overseas Contingency Operations by providing secure, robust, physically diverse terrestrial and airborne transmission paths providing information services between fixed and deployed operating locations. HFGCS has also been identified as a key communications component in supporting operations in an anti-access area-denial (A2AD) environment.

The HFGCS program recently updated system consoles to replace end-of-life components and to provide increased system security and operations capabilities. The program also installed additional radios at HFGCS stations to consolidate with US Navy operations, allowing the Navy to close obsolete HF stations. FY18 funds Voice over Internet Protocol (VoIP) external interfaces to replace the obsolete switches and communications infrastructure supporting C2 operations, Direct Mission Support/Program Management Administration (DMS/PMA), System Engineering, Joint Interoperability Test Center (JITC) Installation Testing and shipping costs for these procurement efforts.

Funding for this exhibit contained in PE 0303133F.

Military Necessity: Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items.

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Other Related Program Elements: N/A

| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 |                               | <b>Date:</b> May 2017 |
|---|-------------------------------|-----------------------|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title: |                       |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 837190 / Radio Equipment      |                       |
| Equip / BSA 7: Organization and Base  |                               |                       |

ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

#### Justification:

- 1. SCOPE COMMAND RADIO/NETWORK INFRASTRUCTURE: The Scope Command Radio/Network Infrastructure requires continuous sustainment to replace technically obsolete and logistically unsupportable equipment to maintain existing capability. These projects continue the implementation of updated COTS radio and console capabilities into the HFGCS network. The current projects update the system efficiencies within radio operations and mission control, as well as maintain interoperability and compatibility with the Global Information Grid (GIG) and the Defense Information System Network (DISN). The HFGCS FY18 program supports three main projects within the Scope Command Radio/Network Infrastructure Program and continues the Antenna Replacement program. The FY18 HFGCS Network Infrastructure program includes the Audio Communications Functionality (ACF) Phase II. Hekimian Systems Test Equipment Replacement and the Receive Matrix Replacement.
- A. The ACF program provides updated audio functionality at an individual HFGCS radio station by replacing the obsolete Digital Electronic Switch (DES), as neither the DES nor Liberty Star-3 (LS-3) switch is on the Approved Product List. The use of these switches also limits the ability to maintain information assurance certification for HFGCS. Removing the IDPX-1000 DES and LS-3 from the HFGCS and replacing them with Open Architecture, non-proprietary, commercially available, modular components ensures the circuit interfaces are compatible with DISA architecture evolution as identified in the DISN Technical Evolution Plan and the DISN Overarching Technical Strategy 2011. This follows the effort in FY17 which demonstrates the Network Control Station capability. Installation of the final ACF capability will be in FY20-21. This continues the transition of the HFGCS network from an analog based to internet protocol (IP) based network.
- B. FY18 funding purchases replacement system test equipment for installation in the 13 stations and will update the existing Control and Management System (CCMS) software to control the replacement equipment. The existing Hekimian System Test Equipment is obsolete and no longer supportable by the manufacturer. The test equipment is critical to maintaining operational capability of the radio and antenna equipment for efficient operation.
- C. FY18 funding purchases 15 new Receive Matrices and installs them at the 13 stations, with one installation at the Systems Integration Lab and 1 spare. The funding will also update existing CCMS software to control the new Receive Matrix. The existing receive matrices have become obsolete and there are no longer spare parts manufactured to maintain the capability to interface between the radios and antennas.
- D. Next Generation Console/Unified Capabilities: No Budget Year (FY18) funding requested...
- 2. HIGH FREQUENCY GLOBAL ANTENNA REPLACEMENT: A majority of the HFGCS system antennas have been in operation for 25 to 40 years and have been subjected to degradation due to exposure to severe environmental conditions, salt water, and hurricane force winds. FY18 funds continue the replacement of critical antennas at HFGCS sites; actual locations and antenna selections will be based on technical assessment of the antenna condition and the operational requirements of the weapon system during execution. Planned replacements for FY18 have been identified at Ascension, Croughton, and Offutt. Additionally mandatory surveys will be conducted to prepare for future antenna installations at Lajes, West Coast, Puerto Rico, Sigonella, Elmendorf, Yokota, and Hawaii scheduled for follow-on efforts.
- 3. FY18 funds for program management administration costs will provide financial management, engineering and technical support for the program office. FY18 also funds Direct Mission Support, including support associated with equipment installation, engineering, technical orders, sustainment engineering, shipping, and implementation. This includes interoperability testing and technical interchange meetings.

LI 837190 - Radio Equipment

Air Force

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837240 / CCTV/Audiovisual Equipment

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |        |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|--------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total  |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 6.144            | 7.449             | 5.480            | 0.000            | 5.480          | 9.065           | 5.114         | 5.209   | 5.302   | -        | 43.763 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Net Procurement (P-1) (\$ in Millions)         | -            | 6.144            | 7.449             | 5.480            | 0.000            | 5.480          | 9.065           | 5.114         | 5.209   | 5.302   | -        | 43.763 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Total Obligation Authority (\$ in Millions)    | -            | 6.144            | 7.449             | 5.480            | 0.000            | 5.480          | 9.065           | 5.114         | 5.209   | 5.302   | -        | 43.763 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) | •       |         |          |        |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | =              | -               | -             | -       | -       | -        | -      |

### **Description:**

The FY17 funding request was reduced by \$.009M to account for the availability of prior year execution balances.

Visual Information Activities - Strategic PE 0102890F - P-40A

Imagery Acquisition and Audiovisual (AV) systems and their products are used throughout the Air Force to inform and train warfighters and to document combat operations and other events of historical significance. Combat video documentation is used for operational reporting and analysis, situational awareness, battle damage assessment, intelligence and operational analysis, casualty identification, and the historical record. In addition, video and multimedia based products are developed for warfighter operations, readiness training, medical videography, public and internal information, testing and evaluation, and corporate communications. Commanders recognize that imagery quickly conveys very accurate and unbiased information, and are requiring greater amounts of video imagery to help meet the challenges of a very active warfighting force. The Air Force is meeting this challenge by dedicating funding to procure and sustain this important capability by replacing older video studio systems with newer and more capable equipment and systems for both Air Force video production and combat/contingency documentation teams. Imagery acquisition systems are centrally managed to establish and maintain standardization of systems, as well as to ensure full interoperability with all other electronic image acquisition, transmission system formats, and presentation systems used in the Air Force.

#### Justification:

Visual Information Activities - Strategic PE 0102890F - P-40A

FY18 Funds procure items to meet ÅF mandates from CJCSI 3205.01C, DODI 5040.02, and AFI 35-109. These policy documents exist to ensure DoD and AF compliance with public laws: 36 CFR 1237/1220 and Title 44 Chapters 3301/3101. These funds are used for audio/visual equipment funding at the only three AF active duty COMCAM squadrons, which provide lobal/deployable rapid response during wartime operations, worldwide crises, contingencies, joint exercises, and humanitarian operations. Additionally, these funds procure audio/visual equipment supporting AF-wide(garrison and deployed) needs for photo, graphics and video products that aid public diplomacy, internal/external communication, information operations, operational/planning efforts, and effective/efficient training.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837300 / Base Comm Infrastructure

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|  | Prior        |                  |                   | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
|--|--------------|------------------|-------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 83.730           | 169.715           | 130.539          | 55.000           | 185.539        | 167.083         | 130.341       | 125.944 | 75.866  | -        | 938.218 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 83.730           | 169.715           | 130.539          | 55.000           | 185.539        | 167.083         | 130.341       | 125.944 | 75.866  | -        | 938.218 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 83.730           | 169.715           | 130.539          | 55.000           | 185.539        | 167.083         | 130.341       | 125.944 | 75.866  | -        | 938.218 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                | -                | -              | -               | -             | -       | -       | -        | -       |

# **Description:**

This is a FY17 New Start

AF Offensive Cyberspace Operations - PE 0208087F - P-40A

Air Education and Training Command (AETC) Cyber Workforce Training: Procure equipment to support emergency warfighting readiness requirements and increase scalability and capacity. Establishes network protection and replaces vulnerability intrusion detection system. This program will procure Cisco switches and routers, servers, network traffic generators, fiber optic cabling, software, simulators, and required network components to support the Cyberspace mission requirements.

MQ-9 Unmanned Aerial Vehicle (UAV) PE 0205219F - P-40A

MQ-9 Reaper Squadron Operations Center (SOC) Communications Infrastructure Equipment: This equipment supports MQ-9 SOCs which provide critical mission data and tasking information to the aircrew and disseminate and/or exchange mission data with decision-makers and the intelligence community.

MINUTEMAN Communications PE 0101323F - P-40A

This equipment supports the Minuteman Minimum Essential Communication Network (MEECN) Program (MMP) with Very Low Frequency (VLF) cable infrastructure. The underground cables at Intercontinental Ballistic Missile (ICBM) Launch Control Centers (LCCs) are aging and require replacement. All cables available for salvage have been harvested and the stockpile has been depleted. This program supports the nuclear mission by providing an adequate bench stock to ensure a survivable nuclear communications path from the POTUS/SECDEF to ICBM forces in the field.

F-22A Squadrons PE 0207138F - P-40A

F-22 Communications Infrastructure Equipment: This equipment provides communications equipment in support of F-22 Raptor wing headquarters, operational, and maintenance squadrons. Base communications infrastructure is essential to meet evolving Warfighter mission requirements.

Engineering and Installation (E&I) - Air Force PE 0207436F - P-40A

Air Force Space Command (AFSPC) Lead Command Base Communications Infrastructure: E&I supports enterprise network capability and life cycle replacement of common user communications systems, AF Network Defensive capabilities, as well as Installation Emergency Management (IEM) infrastructure. E&I funds support communications availability and reliability, providing consistent, compatible, and interoperable capability through advanced technology and architecture. Installations include network communications infrastructure, fiber optic and copper cabling, and associated manhole duct systems for cable projects.

LI 837300 - Base Comm Infrastructure
Air Force

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:

3080F; Other Procurement, Air Force / BA 03: Electronics and Telecommunications 837300 / Base Comm Infrastructure

Equip / BSA 7: Organization and Base

Program Elements for Code B Items: N/A Other Related Program Elements: N/A ID Code (A=Service Ready, B=Not Service Ready): A

Line Item MDAP/MAIS Code: N/A

### Contingency Operations PE 0208028F - P-40A

U.S. Air Forces in Europe and Air Forces Africa (USAFE-AFAFRICA) Contingency Operations Infrastructure Equipment: Contingency Operations equipment provides the integrated capability needed to establish and maintain air base readiness during contingencies. Infrastructure equipment will enable integration and coordination of those unit operations that interact during a contingency to establish, maintain or restore the installation's capability to execute its assigned mission.

#### Cyber Command (CYBERCOM) Activities PE 0208059F - P-40A

USCYBERCOM Communications Infrastructure: USCYBERCOM responsibilities include planning and coordinating Computer Network Operations (CNO) capabilities; operational and tactical level planning and day-to-day employment of assigned and attached Offensive Cyber Operations forces; planning and coordination of cyber capabilities that have trans-regional effects or that directly support national objectives; and providing Offensive and Defensive Cyber Operations support for assigned missions. Base communications infrastructure (e.g., servers, routers, Local Area Networks (LANs), End Building Node (EBN) hardware) supports ongoing USCYBERCOM activities.

#### Information Technology Services Management - Tactical Air Forces PE 0208550F - P-40A

- a. Air Force Special Operations Command (AFSOC) Base Communications Infrastructure Equipment: This equipment supports more than 18,000 AFSOC active-duty, Air Force Reserve, Air National Guard and civilian personnel and allow AFSOC to meet the mission of presenting combat ready forces to conduct and support global special operations missions. Funds end of life IT connect infrastructure to provide dial tone and Internet access across the AFSOC enterprise. This is a continuing requirement, where aging legacy components are no longer funded through other cyber portfolios and each MAJCOM must replace these critical components.
- b. Pacific Air Forces (PACAF) Base Communications Infrastructure Equipment: PACAF network equipment and life cycle replacement of base information technology systems supports base operations, command-wide connectivity, and transformation efforts. The large geographic separation between PACAF units significantly raises the importance of a robust communications infrastructure to ensure war fighter access to secure voice, data, and video systems.
- c. Air Combat Command (ACC) Base Communications Infrastructure Equipment: ACC base communications funds support life cycle management of network servers, routers, ductwork, cables, LANs, voice and data switches, Land Mobile Radio (LMR) systems, and end building node hardware. This infrastructure meets the requirements of ACC's 143,000 active-duty, Air Force Reserve, Air National Guard and civilian personnel at 11 major bases and 7 associated units throughout the United States.
- d. USAFE-AFAFRICA Base Communications Infrastructure Equipment: USAFE-AFAFRICA base communications funding supports the acquisition, and installation of base network infrastructures, especially C2 communications, located at USAFE-AFAFRICA Main Operating Bases (MOBs) and Geographically Separated Units (GSUs) consisting of a HQ, one numbered Air Force, seven MOBs and 137 GSUs. Specific critical base communications infrastructure provide support for Headquarters, Warfighting Numbered Air Force and Operational wings, flight support, emergency actions, and the operational planning, delivering, sustaining, integrating, and managing of USAF communications capabilities, networks, and applications in the USEUCOM and USAFRICOM theaters based on geographical combatant command orders and plans. Base communications infrastructure is required to support the European Infrastructure Consolidation (EIC) which is an OSD-directed process to restructure basing of forces within the European Command (EUCOM) Area of Responsibility (AOR). FY16 funding totals include \$15,400M for Overseas Contingency Operations (OCO).

### Long-Haul Communications - DCS PE 0303126F - P-40A

USAFE Long Haul Communications Infrastructure Equipment: The Technical Control Facility Program replaces circuit distribution systems in technical control facilities and throughout base communications infrastructure. This capability addresses USAFE distribution of circuits from the long haul point of presence to the on-base circuit termination point. Distribution equipment using copper cable is being replaced by fiber optic equipment. Additionally, the Joint Intelligence Analysis Center (JIAC) is being moved as part of the EIC program from RAF Molesworth to RAF Croughton. This relocation requires extensive long haul infrastructure upgrades at RAF Croughton and communications equipment to support dual operations at RAF Croughton and RAF Molesworth.

#### Theater Nuclear Weapon Storage & Security System PE 0305155F - P-40A

Theater Nuclear Weapon Storage and Security System (WS3) Communications Infrastructure Equipment: Funds support the procurement, integration, and installation of commercial off-the-shelf (COTS) communications equipment and alarm processing equipment and software associated with the Alarm Communications and Display (AC&D) system, security assessment enhancements, and fiber optic cable purchase and installation at multiple OCONUS nuclear capable WS3 locations. These efforts directly impact sustainment efforts for the aging WS3 system and NATO's nuclear deterrence mission.

Information Technology Services Management - Other PE 0305550F - P-40A

LI 837300 - Base Comm Infrastructure Air Force Page 2 of 23

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P-1 Line #48

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837300 / Base Comm Infrastructure

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready); A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

a. Air Force District of Washington (AFDW) Base Communications Network Equipment: Funds support the procurement of communications infrastructure replacements for AFDW's classified and unclassified networks. These efforts directly impact accomplishment of the AF mission at all levels such as strategic decision making, execution of operations, and support to US senior leadership including the POTUS, SECDEF, CJCS, and the CSAF. This is a continuing requirement.

Program Elements for Code B Items: N/A

b. AFSPC Base Communications Infrastructure Equipment: Procurements ensure base-level network access for more than 40,000 AFSPC professionals including military, civilians and contractors. Funding supports base operations by providing required AFSPC-wide hardware and software purchases, ensuring the deployment of consistent, compatible, and interoperable communications technology. This is a continuing requirement.

#### Communications and Information Technology PE 0308611F - P-40A

AFSPC Communications Infrastructure Equipment: Funds enable timely and assured delivery of data and voice communications supporting a wide range Air Force organizations and decision makers. This program provides AFSPC with effective C2 of information systems by procuring robust enterprise communications infrastructure that every worker, office, and organization depends on to perform their mission. This funding supports life cycle management of network servers, routers, ductwork, cables, LANs, voice and data switches, Land Mobile Radio (LMR) systems, and end building node hardware in order to maintain consistent, compatible, and interoperable infrastructure and architecture. Funds are also needed to provide communications infrastructure to meet evolving mission requirements, support military construction projects and handle the multitude of smaller, individual communications, computer, air traffic control and weather instrumentation connectivity needs. This funding will be executed by one or all of the following: Air Force Network Integration Center, Air Force Spectrum Management Office, AFSPC Cyber Support Squadron or HQ AFSPC

Information Technology Services Management - Mobility Air Forces PE 0408550F - P-40A

Air Force District Washington (AFDW) Base Communications Infrastructure Equipment: Funds support network infrastructure replacements and AFDW's classified and unclassified networks. These efforts directly support strategic decision making, execution of operations, and support to US senior leadership including the POTUS, SECDEF, CJCS, and the CSAF. This is a continuing requirement.

Information Technology Services Management - AFR PE 0505550F - P-40A

Air Force Reserve Command (AFRC) Base Communications Infrastructure Equipment: Funds provide for recapitalization, and support of AFRC base communications infrastructure. AFRC is an AF MAJCOM consisting of a HQ, three Numbered Air Forces (NAFs), 45 flying wings/groups and more than 40 GSUs; Air Reserve Personnel Center (ARPC) and the Major Command Coordinating Center (MCCC). Funding supports AFR-wide programs providing base communications infrastructure consistency. Funding provides AFR-wide hardware and software purchases, thus ensuring the deployment of consistent, compatible, and interoperable technology and architecture. This is a continuing requirement.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the armed forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Information Technology Services Management - ANG PE 0508550F - P-40A

Air National Guard (ANG) Base Communications Infrastructure Equipment: Funding supports the operations, maintenance, and sustainment of IT components, infrastructure, and processes enabling effective operations and defense of the ANG enterprise portion of the Air Force Network (AFNet). Funds provide for IT life cycle support for 90 ANG Main Operating Bases (MOB), 153 GSUs, and the 299th Cyber Security Control (CSCS) weapon system. Funds support ANG-wide base communications infrastructure projects consistent with AF IT standards and for compatibility of the ANG enterprise with the AF and Department of Defense (DoD) centralized networks. A major component of this funding is to support the procurement and implementation of a robust Installation Notification and Warning System (INWS) that provides Giant Voice, Indoor Alerts, Telephone call/text alerts, software for computer alerts, and other alerting methods to meet DOD and Federal warning requirements for all ANG bases. This is a continuing requirement.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the armed forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Information Technology Services Management - Logistics PE 0708550F - P-40A

LI 837300 - Base Comm Infrastructure

Air Force Materiel Command (AFMC) Base Communications infrastructure Equipment: Funding allows AFMC to support AF operations by sustaining critical cyber systems that provide timely and assured delivery of data and voice communications for organizations at nine AFMC installations with 100,000 personnel. Funding directly supports the warfighter on a 24/7 operational basis by providing AFMC the ability

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Air Force Page 3 of 23 P-1 Line #48

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837300 / Base Comm Infrastructure

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

to deliver cyber capabilities to sustain aircraft sortie generation rates, weapon systems availability, system operational testing, and timely acquisition of equipment parts. This program is vital for AFMC's life cycle management of network servers, service desk, repair of critical communications infrastructure, routers, ductwork, cables, Land Area Networks (LANs), voice and data switches, and Mass Notifications and Land Mobile Radio (LMR) systems. Funding allows for end-of-life replacement of end building node network, data and voice hardware that complies with AF cyber architecture enterprise standards.

Information Technology Services Management - Training PE 0808550F - P-40A

Air Education and Training Command (AETC) Base Communications Infrastructure Equipment: Funds support base-approved and MAJCOM-validated communications requirements as identified in base communications blueprints. These requirements include flying and technical training, education, recruiting, and accession mission, command and control, as well as first responder services at all 11 AETC bases. This is a continuing requirement.

| Seconda | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|---------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF      | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|         | Total Obligation Authority | 79.635  | 111.107 | 114.554         | 55.000         | 169.554          | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG    | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|         | Total Obligation Authority | 3.828   | 58.281  | 10.648          | 0.000          | 10.648           | 9.028   | 9.188   | 9.353   | 9.521   |
| AFR     | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|         | Total Obligation Authority | 0.267   | 0.327   | 5.337           | 0.000          | 5.337            | 0.343   | 0.349   | 0.355   | 0.361   |
| otal: C | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|         | Total Obligation Authority | 83.730  | 169.715 | 130.539         | 55.000         | 185.539          | 9.371   | 9.537   | 9.708   | 9.882   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837300 / Base Comm Infrastructure

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule   |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|---|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*  | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) I (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Contingency Operations  |             |          |                       | - / -                                    | - /2.499                                 | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a           | Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities) |             |          |                       | - / -                                    | - /3.952                                 | - /41.817                                | - /0.000                                 | - /0.000                                 | - / 0.000                                |
| P-40a           | AF Offensive Cyberspace Operations                                      |             |          |                       | - / -                                    | - / 0.000                                | - / 13.000                               | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a           | Communications and Information Technology                               |             |          |                       | - / -                                    | - / 0.000                                | - /5.812                                 | - / 5.956                                | - / 0.000                                | - / 5.956                                |
| P-40a           | MQ-9 UAV  |             |          |                       | - / -                                    | - / 0.000                                | - / 0.000                                | - /7.529                                 | - / 0.000                                | - / 7.529                                |
| P-40a           | F-22A Squadrons   |             |          |                       | - / -                                    | - / 0.492                                | - / 0.971                                | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a           | Engineering and Installation - Air Force                                |             |          |                       | - / -                                    | - / 14.776                               | - / 0.000                                | - / 17.568                               | - / 0.000                                | - / 17.568                               |
| P-40a           | Information Technology Services Management - Tactical Air Forces        |             |          |                       | - / -                                    | - / 19.821                               | - / 36.578                               | - / 51.651                               | - / 55.000                               | - / 106.651                              |
| P-40a           | Long-Haul Communications - DCS  |             |          |                       | - / -                                    | - / 0.199                                | - /0.000                                 | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a           | Theater Nuclear Weapon Storage & Security System                        |             |          |                       | - / -                                    | - /7.163                                 | - / 6.159                                | - / 24.957                               | - / 0.000                                | - / 24.957                               |
| P-40a           | Information Technology Services Management - Other                      |             |          |                       | - / -                                    | - / 28.645                               | - /3.082                                 | - / 3.166                                | - / 0.000                                | - / 3.166                                |
| P-40a           | Information Technology Services Management - Mobility Air Forces        |             |          |                       | - / -                                    | - / 0.000                                | - / 0.738                                | - / 0.758                                | - / 0.000                                | - / 0.758                                |
| P-40a           | Information Technology Services Management - AFR                        |             |          |                       | - / -                                    | - / 0.267                                | - / 0.327                                | - / 5.337                                | - / 0.000                                | - / 5.337                                |
| P-40a           | Information Technology Services Management - ANG                        |             |          |                       | - / -                                    | - /3.828                                 | - / 58.281                               | - / 10.648                               | - / 0.000                                | - / 10.648                               |
| P-40a           | Information Technology Services Management - Logistics                  |             |          |                       | - / -                                    | - / 1.461                                | - / 1.785                                | - / 1.835                                | - / 0.000                                | - / 1.835                                |
| P-40a           | Information Technology Services Management - Training                   |             |          |                       | - / -                                    | - / 0.627                                | - / 1.165                                | - / 1.134                                | - / 0.000                                | - / 1.134                                |
| P-40            | Total Gross/Weapon System Cost  |             |          |                       | - 1 -                                    | - / 83.730                               | - / 169.715                              | - / 130.539                              | - / 55.000                               | - / 185.539                              |

\*Title represents 1) the Number / Title for Items: 2) the Number / Title [DODIC] for Ammunition: and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

This program, Base Comm Infrastructure P-40A Item Equipment, is a new start.

AF Offensive Cyberspace Operations PE 0208087F - P-40A

AETC Cyberspace Workforce Training is required to address emergency warfighting readiness requirements. Funding is required for AETC to adjust the Cyber Initial Skills Training (IST) course content and length to meet operational unit training needs to include increasing Cyberspace Mission Force student throughput. Enables the 24 AF to meet USCYBERCOM directed IOC/FOC timelines by FY18. No FY18 Funding requested.

MQ-9 Unmanned Aerial Vehicle (UAV) PE 0205219F - P-40A

MQ-9 Reaper Squadron Operations Center (SOC) Communications Infrastructure Equipment: FY18 funds are required for the procurement and installation of hardware and software at MQ-9 SOCs to enable mission communications and exchange of mission data necessary for the employment of Remote Split Operations for MQ-9 Reaper missions.

MINUTEMAN Communications PE 0101323F - P-40A No FY18 funding requested.

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LI 837300 - Base Comm Infrastructure Air Force Page 5 of 23

P-1 Line #48

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837300 / Base Comm Infrastructure

Equip / BSA 7: Organization and Base

ID Code (A=Service Ready, B=Not Service Ready); A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

F-22A Squadrons PE 0207138F - P-40A

F-22 Communications Infrastructure Equipment: No FY18 funding requested.

Engineering and Installation - Air Force PE 0207436F - P-40A

Air Force Space Command (AFSPC) Lead Command Base Communications Infrastructure: FY18 E&I funds ensure life cycle support to keep base communications infrastructure on pace with current technological developments. FY18 funds provide base communications infrastructure support to include LMR system replacement, communications cable reutilization and redistribution, and base telephone switch replacement.

Contingency Operations PE 0208028F - P-40A

U.S. Air Forces in Europe and Air Forces Africa (USAFE-AFAFRICA) Contingency Operations Infrastructure Equipment: No FY18 funding requested.

Cyber Command (CYBERCOM) Activities PE 0208059F - P-40A

USCYBERCOM Communications Infrastructure: FY18 funding requested.

Information Technology Services Management - Tactical Air Forces PE 0208550F - P-40A

- a. Air Force Special Operations Command (AFSOC) Base Communications Infrastructure Equipment: FY18 funds will be used by AFSOC to recapitalize data, voice, and video equipment supporting AFSOC forces organized under three active-duty wings, one reserve wing, one National Guard wing, two overseas groups, and several direct reporting units.
- b. Pacific Air Forces (PACAF) Base Communications Infrastructure Equipment: FY18 funding supports PACAF's acquisition and installation of Unified Capabilities (UC) and communications infrastructure at remote and Geographically Separated Unit (GSU) locations. Procurements include VoIP solutions to replace the obsolete telephone switches and communications infrastructure supporting C2 for deploying squadrons at these (flex base) locations. This capability directly supports COMPACAF's adaptive combat employment strategy for the Pacific theater.
- c. Air Combat Command (ACC) Base Communications Infrastructure Equipment: FY18 funds continue life cycle support of base communications infrastructure at ACC bases and replaces outdated network voice and data equipment hardware to meet mission requirements of ACC's C2 and mission support users.
- d. USAFE-AFAFRICA Base Communications Infrastructure Equipment: FY18 funds replace USAFE's outdated Land Mobile Radio distribution systems between intrabase communication networks/nodes thereby eliminating bottlenecks in trunking systems across USAFE-AFAFRICA Main Operating Bases (MOBs) and GSUs. Base network infrastructure procurements meet network communications requirements for USAFE-AFAFRICA users at MOBS and GSUs. Additionally, FY18 funds procure communications infrastructure in support of the EIC program.

Long-Haul Communications - DCS PE 0303126F - P-40A

USAFE Long Haul Communications Infrastructure Equipment: FY18 funding will procure equipment to support dual Joint Intelligence Analysis Center (JIAC) operations at RAF Croughton and RAF Molesworth. Dual homing acquisition includes site end equipment purchases/installations.

Theater Nuclear Weapon Storage & Security System PE 0305155F - P-40A

Theater Nuclear Weapon Storage and Security System (WS3) Communications Infrastructure Equipment: FY18 funding supports the procurement and installation of communications and alarm equipment, buried fiber optic cable, encryption modernization, and increased security assessment capabilities for multiple OCONUS locations in support of the NATO nuclear deterrence mission in Europe.

Information Technology Services Management - Other PE 0305550F - P-40A

- a. Air Force District Washington (AFDW) Base Communications Network Equipment: FY18 funds procure wide and local area network hardware (i.e., servers, routers, hubs and network systems) at Joint Base Anacostia-Bolling, Joint Base Andrews, and Headquarters Air Force. This program invests in office automation systems and computer networks in order to procure high-quality, high-speed connections to both public and classified network, and equipment required to react to emerging and emergency mission requirements in the National Capital Region (NCR).
- b. AFSPC Base Communications Infrastructure Equipment: FY18 funding supports AFSPC-wide network communications hardware and software purchases.

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LI 837300 - Base Comm Infrastructure Air Force

P-1 Line #48

**Date:** May 2017 Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

837300 / Base Comm Infrastructure

Equip / BSA 7: Organization and Base Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

Communications and Information Technology PE 0308611F - P-40A

AFSPC Communications Infrastructure Equipment: FY18 funds ensure AF enterprise and base-level network access for more than 615,000 Total Force professionals including military, civilians and contractors. Funding supports enterprise and base operations by providing required AF and AFSPC-wide hardware and software purchases, ensuring the deployment of consistent, compatible, and interoperable communications technology to support Joint Information Enterprise efforts across the AF. Hardware and software purchases may include routers, switches, and other network systems to support UC capabilities and the joint enterprise.

Information Technology Services Management - Mobility Air Forces PE 0408550F - P-40A

Air Force District Washington (AFDW) Base Communications Infrastructure Equipment: FY18 funds procure wide and local area network at Joint Base Anacostia-Bolling, Joint Base Andrews, and Headquarters Air Force. This program invests in office automation systems and computer networks to support high-speed connections to public and classified networks in support of National Capitol Region (NCR) mission requirements.

Information Technology Services Management - AFR PE 0505550F - P-40A

Air Force Reserve Command (AFRC) Base Communications Infrastructure Equipment: FY18 funds support data, voice, and video projects to promote compatibility with the AF "Active" component architectures. In addition to funding AFR-wide programs. Funds also acquire equipment for life cycle support of critical base-level communications infrastructure requirements.

Information Technology Services Management - ANG PE 0508550F - P-40A

Air National Guard (ANG) Base Communications Infrastructure Equipment: FY18 funds continue to support installation of command purchased information technology and software to maintain a consistent, compatible, and interoperable infrastructure and architecture. This functionality ensures compatibility of ANG networks with the AF Enterprise.

Information Technology Services Management - Logistics PE 0708550F - P-40A

Air Force Materiel Command (AFMC) Communications Infrastructure Equipment: FY18 funds support command wide and base approved, MAJCOM validated communications requirements. These provide base life cycle management of AFMC's classified and unclassified network server consolidation, Land Mobile Radio (LMR) systems, routers, voice and data switches, ductwork, cabling, and end building node hardware that support UC and communications infrastructure. Procurements include VoIP solutions to replace the obsolete telephone switches and communications infrastructure.

Information Technology Services Management - Training PE 0808550F - P-40A

Air Education and Training Command (AETC) Base Communications Infrastructure Equipment: FY18 funds will be used to continue the process of replacing AETC legacy base LAN infrastructure originally designed to carry data only in order to comply with the increased reliability required under Assured Service LAN (ASLAN) as other services (e.g., voice, enterprise LMR) are transitioned to the LAN.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3080F / 03 / 7837300 / Base Comm InfrastructureContingency Operations

|   |          |                       |              |               |                         |              |               |                         |           | •             |                         |           |               |                         | -         |               | ) -                     |           |               |                         |
|---|----------|-----------------------|--------------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|   |          |                       | F            | Prior Year    | s                       |              | FY 2016       |                         |           | FY 2017       |                         | FY        | 7 2018 Ba     | se                      | F         | / 2018 OC     | :0                      | F         | / 2018 Tot    | al                      |
| Item Number /<br>Title [DODIC]                                | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized   |          |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| USAFE-AFAFRICA<br>Contingency<br>Operations<br>Infrastructure | A        |                       | -            | -             | -                       | -            | -             | 2.499                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Secondary Distribution  | 7        |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF  |          |                       |              | -             | -                       |              | -             | 2.499                   |           | -             | 0.000                   |           | -             | 0.000                   |           | -             | 0.000                   |           | -             | 0.000                   |
| Subtotal: Uncategorized                                       |          |                       | -            | -             | -                       | -            | -             | 2.499                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Total   |          |                       | -            | -             | -                       | -            | -             | 2.499                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Note: Subtotals or To   | tale in  | thie F                | vhihit P-10a | may not be    | evact or si             | im exactly c | lue to roun   | dina                    |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:

3080F / 03 / 7 837300 / Base Comm Infrastructure

Service Support to Other Core Missions -STRATCOM (CYBERCOM Activities)

|  |          |                       |           |               |                         |           | I .           |                         |           |               |                         |           |               |                         |           |               | •                       |           |               | ,                       |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          | Prior Years           | s         |               | FY 2016                 | ,         |               | FY 2017                 |           | FY            | / 2018 Ba               | se        | F             | Y 2018 OC               | 0         | FY            | 2018 To                 | tal       |               |                         |
| Item Number /<br>Title [DODIC]                 | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| USCYBER COMMAND                                |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| USCYBERCOM<br>Communications<br>Infrastructure | A        |                       | -         | -             | -                       | -         | -             | 3.952                   | -         | -             | 41.817                  | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.0                     |
| Secondary Distribution                         |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 3.952                   |           | -             | 41.817                  |           | -             | 0.000                   |           | -             | 0.000                   |           | -             | 0.0                     |
| Subtotal: USCYBER COM                          | IMANI    | D                     | -         | -             | -                       | -         | -             | 3.952                   | -         | -             | 41.817                  | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.0                     |
| Total  |          |                       | -         | -             | -                       | -         | -             | 3.952                   | -         | -             | 41.817                  | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.0                     |

| Exhibit P-40a, Budget Item Justification For Aggregated Ite | Date: May 2017                    |                                    |
|---|-----------------------------------|------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:      | P-1 Line Item Number / Title:     | Aggregated Items Title:            |
| 3080F / 03 / 7  | 837300 / Base Comm Infrastructure | AF Offensive Cyberspace Operations |

| 00001 7 00 7 7          |               |               |             |             | - 1           | 0010001          | Dasc O | J             | astracte  | 110     | , `           | 711 Officialité dyberapade operations |        |               |             |        |               |               |        |               |
|-------------------------|---------------|---------------|-------------|-------------|---------------|------------------|--------|---------------|-----------|---------|---------------|---------------------------------------|--------|---------------|-------------|--------|---------------|---------------|--------|---------------|
|                         |               |               | Prior Years |             |               | FY 2016          |        |               |           | FY 2017 |               | FY 2018 Base                          |        |               | FY 2018 OCO |        |               | FY 2018 Total |        |               |
| Item Number /           | ID            | MDAP/<br>MAIS | Unit Cost   | Qty         | Total<br>Cost | Unit Cost        | Qty    | Total<br>Cost | Unit Cost | Qty     | Total<br>Cost | Unit Cost                             | Qty    | Total<br>Cost | Unit Cost   | Qty    | Total<br>Cost | Unit Cost     | Qty    | Total<br>Cost |
| Title [DODIC]           | CD            | Code          | (\$ M)      | (Each)      | (\$ M)        | (\$ M)           | (Each) | (\$ M)        | (\$ M)    | (Each)  | (\$ M)        | (\$ M)                                | (Each) | (\$ M)        | (\$ M)      | (Each) | (\$ M)        | (\$ M)        | (Each) | (\$ M)        |
| Uncategorized           | Incategorized |               |             |             |               |                  |        |               |           |         |               |                                       |        |               |             |        |               |               |        |               |
| AF Cyberspace Ops       | Α             |               | -           | -           | -             | -                | -      | 0.000         | -         | -       | 13.000        | -                                     | -      | 0.000         | -           | -      | 0.000         | -             | -      | 0.000         |
| Secondary Distribution  | )             |               |             |             |               |                  |        |               |           |         |               |                                       |        |               |             |        |               |               |        |               |
| AF                      |               |               |             | -           | -             |                  | -      | 0.000         |           | -       | 13.000        |                                       | -      | 0.000         |             | -      | 0.000         |               | -      | 0.000         |
| Subtotal: Uncategorized |               |               | -           | -           | -             | -                | -      | 0.000         | -         | -       | 13.000        | -                                     | -      | 0.000         | -           | -      | 0.000         | -             | -      | 0.000         |
| Total                   |               |               | -           | -           | -             | -                | -      | 0.000         | -         | -       | 13.000        | -                                     | -      | 0.000         | -           | -      | 0.000         | -             | -      | 0.000         |
| Mata, Cubtatala az Tat  | من مام        | thin Ex       | hibit D 40a | manu mat ha |               | una assa atlis a | 40     | ماني م        | *         |         |               |                                       |        | *             | *           |        |               | •             |        |               |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Barron Infrastructure

Prior Years

Prior Years

FY 2016

FY 2017

FY 2018 Base

FY 2018 OCO

FY 2018 Total

Total

Total

Total

Total

Total

|  |          |                       | Prior Years |               | FY 2016                 |           |                      | FY 2017                 |           |               | FY 2018 Base            |           |               | FY 2018 OCO             |           |                      | FY 2018 Total           |           |               |                         |
|--|----------|-----------------------|-------------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]                         | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| AFSPC  |          |                       |             |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |
| AFSPC<br>Communications<br>Infrastructure<br>Equipment | A        |                       | -           | -             | -                       | -         | -                    | 0.000                   | -         |               | 5.812                   | -         | -             | 5.956                   | -         | -                    | 0.000                   | -         | -             | 5.956                   |
| Secondary Distribution                                 | 1        |                       |             |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |
| AF   |          |                       |             | -             | -                       |           | -                    | 0.000                   |           | -             | 5.812                   |           | -             | 5.956                   |           | -                    | 0.000                   |           | -             | 5.956                   |
| Subtotal: AFSPC  |          |                       | -           | -             | -                       | -         | -                    | 0.000                   | -         | -             | 5.812                   | -         | -             | 5.956                   | -         | -                    | 0.000                   | -         | -             | 5.956                   |
| Total  |          |                       | -           | -             | -                       | -         | -                    | 0.000                   | -         | -             | 5.812                   | -         | -             | 5.956                   | -         | -                    | 0.000                   | -         | -             | 5.956                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7 Aggregated Items Title: MQ-9 UAV P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure

| 30001 7 00 7 7                 |          |                       |              |               |                         |              | '             | 001 000 1               | Dasc O    | J             | asii uoii               | ai C      |               |                         | IVI       | Q-J UA        | v                       |           |               |                         |
|--------------------------------|----------|-----------------------|--------------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                |          |                       | Prior Years  |               | FY 2016                 |              |               | FY 2017                 |           |               | FY 2018 Base            |           |               | FY 2018 OCO             |           |               | FY 2018 Total           |           |               |                         |
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                  |          |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| PMA Other<br>Government Costs  | А        |                       | -            | -             | -                       | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 2.232                   | -         | -             | 0.000                   | -         | -             | 2.232                   |
| Secondary Distribution         | n        |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                             |          |                       |              | -             | -                       |              | -             | 0.000                   |           | -             | 0.000                   |           | -             | 2.232                   |           | -             | 0.000                   |           | - 7           | 2.232                   |
| Equipment                      | Α        |                       | -            | -             | -                       | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 5.297                   | -         | -             | 0.000                   | -         | -             | 5.297                   |
| Secondary Distribution         | n        |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         | ,         |               |                         |           |               |                         |
| AF                             |          |                       |              | -             | -                       |              | -             | 0.000                   |           | -             | 0.000                   |           | -             | 5.297                   |           | -             | 0.000                   |           | - 1           | 5.297                   |
| Subtotal: Uncategorized        | 1        | ,                     | -            | -             | -                       | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 7.529                   | -         | -             | 0.000                   | -         | -             | 7.529                   |
| Total                          |          |                       | -            | -             | -                       | -            | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 7.529                   | -         | -             | 0.000                   | -         | -             | 7.529                   |
| Note: Subtotals or To          | tals ir  | this F                | xhibit P-40a | may not be    | exact or si             | im exactly o | lue to roun   | dina                    |           |               |                         |           |               |                         |           |               |                         |           |               | •                       |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>837300 / Base Comm InfrastructureAggregated Items Title:<br/>F-22A Squadrons

| 30001 7 03 7 7   |          |                       |              |               |                         |              |               | 031 300 1               | Dase Co   | JIIIII IIIII  | asiiucii                | ii C      |               |                         | '         | 227 04        | uauioiis                |           |               |                         |
|--|----------|-----------------------|--------------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | Р            | rior Year     | s                       |              | FY 2016       | 5                       |           | FY 2017       |                         | FY        | Y 2018 Ba     | se                      | FY        | / 2018 OC     | :0                      | FY        | / 2018 Tot    | al                      |
| Item Number /<br>Title [DODIC]                         | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized  |          |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| F-22A<br>Communications<br>Infrastructure<br>Equipment | A        |                       | -            | -             | -                       | -            | -             | 0.492                   | -         | -             | 0.971                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.00                    |
| Secondary Distribution                                 | n        |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |              | -             | -                       |              | -             | 0.492                   |           | -             | 0.971                   |           | -             | 0.000                   |           | -             | 0.000                   |           | -             | 0.000                   |
| Subtotal: Uncategorized                                | 1        |                       | -            | -             | -                       | -            | -             | 0.492                   | -         | -             | 0.971                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Total  |          |                       | -            | -             | -                       | -            | -             | 0.492                   | -         | -             | 0.971                   | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Note: Subtotals or To                                  | tale ir  | thic E                | vhihit D 10a | may not he    | ovact or ci             | im avactly d | lua ta raur   | dina                    |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Aggregated Items Title:
Engineering and Installation - Air Force

| 30001 7 03 7 7   |          |                       |              |               |                         |              |               | 031 300 1               | Dase C    |               | asiiucii                | ii C      |               |                         | -         | ngineen       | ng and i                | iistaliatit | ו ווא - ווע   | OICE                    |
|--|----------|-----------------------|--------------|---------------|-------------------------|--------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-------------|---------------|-------------------------|
|  |          |                       | Р            | rior Year     | s                       |              | FY 2016       | 5                       |           | FY 2017       |                         | FY        | Y 2018 Ba     | se                      | F         | / 2018 OC     | ю                       | F           | 2018 To       | tal                     |
| Item Number /<br>Title [DODIC]                                 | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost    | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| AFSPC E&I  |          | -                     |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |             | •             |                         |
| AFSPC Lead<br>Command Base<br>Communications<br>Infrastructure | A        |                       | -            | -             | -                       | -            | -             | 14.776                  | -         | -             | 0.000                   | -         | -             | 17.568                  | -         | -             | 0.000                   | -           | -             | 17.568                  |
| Secondary Distribution   | n        |                       |              |               |                         |              |               |                         |           |               |                         |           |               |                         |           |               |                         |             |               |                         |
| AF   |          |                       |              | -             | -                       |              | -             | 14.776                  |           | -             | 0.000                   |           | -             | 17.568                  |           | -             | 0.000                   |             | -             | 17.568                  |
| Subtotal: AFSPC E&I  |          |                       | -            | -             | -                       | -            | -             | 14.776                  | -         | -             | 0.000                   | -         | -             | 17.568                  | -         | -             | 0.000                   | -           | -             | 17.568                  |
| Total  |          |                       | -            | -             | -                       | -            | -             | 14.776                  | -         | -             | 0.000                   | -         | -             | 17.568                  | -         | -             | 0.000                   | -           | -             | 17.568                  |
| Note: Subtetals or To  | tale in  | thic E                | whihit D 10a | may not be    | avact or ci             | im ovactly o | luo to rour   | dina                    |           |               |                         |           |               |                         |           |               |                         |             |               |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7

P-1 Line Item Number / Title:

837300 / Base Comm Infrastructure

Aggregated Items Title: Information Technology Services Management - Tactical Air Forces

|  |          |                       | P         | Prior Years   | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | FY        | / 2018 OC     | 0                       | FY        | 2018 To       | tal                     |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]                                       | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ITSM - Tactical AF's   |          |                       |           |               |                         |           |               | ,                       |           |               | ,                       |           |               |                         |           | ,             |                         |           |               |                         |
| AFSOC Base<br>Communications<br>Infrastructure<br>Equipment          | A        |                       | -         | -             | -                       | -         | -             | 0.543                   | -         | -             | 0.665                   | -         | -             | 2.435                   | -         | -             | 0.000                   | -         | -             | 2.435                   |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 0.543                   |           | -             | 0.665                   |           | -             | 2.435                   |           | -             | 0.000                   |           | -             | 2.435                   |
| PACAF Base<br>Communications<br>Infrastructure<br>Equipment          | A        |                       | -         | -             | -                       | -         | -             | 0.655                   | -         | -             | 0.634                   | -         | -             | 0.652                   | -         | -             | 0.000                   | -         | -             | 0.652                   |
| Secondary Distribution   |          |                       |           |               | ,                       |           |               |                         |           |               | ,                       |           |               | •                       |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 0.655                   |           | -             | 0.634                   |           | -             | 0.652                   |           | -             | 0.000                   |           | -             | 0.652                   |
| ACC Base<br>Communications<br>Infrastructure<br>Equipment            | A        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.000                   |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 0.000                   |           | -             | 0.000                   |
| USAFE-AFAFRICA<br>Base Communications<br>Infrastructure<br>Equipment | A        |                       | -         | -             | -                       | -         | -             | 18.623                  | -         | -             | 35.279                  | -         | -             | 48.564                  | -         | -             | 55.000                  | -         | -             | 103.564                 |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 18.623                  |           | -             | 35.279                  |           | -             | 48.564                  |           | -             | 55.000                  |           | -             | 103.564                 |
| Subtotal: ITSM - Tactical i  | 4F's     |                       | -         | -             | -                       | -         | -             | 19.821                  | -         | -             | 36.578                  | -         | -             | 51.651                  | -         | -             | 55.000                  | -         | -             | 106.651                 |
| Total  |          |                       | -         | -             | -                       | -         | -             | 19.821                  | -         | -             | 36.578                  | -         | -             | 51.651                  | -         | -             | 55.000                  | -         | -             | 106.651                 |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Date: May 2017

Aggregated Items Title:
Long-Haul Communications - DCS

|  |    |                       | Р         | rior Year            | s                       |           | FY 2016              |                         |           | FY 2017              |                         | FY        | ′ 2018 Ba            | se                      | FY        | / 2018 OC            | 0                       | FY        | / 2018 To            | tal                     |
|--|----|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|
| Item Number /<br>Title [DODIC]   | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized  |    |                       |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |
| USAFE Technical<br>Control Facility<br>Program Equipment                         | A  |                       | -         | -                    | -                       | -         | -                    | 0.199                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   |
| Secondary Distribution   |    |                       |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |
| AF   |    |                       |           | -                    | -                       |           | -                    | 0.199                   |           | -                    | 0.000                   |           | -                    | 0.000                   |           | -                    | 0.000                   |           | -                    | 0.000                   |
| European<br>Infrastructure<br>Consolidation (EIC)<br>Communications<br>Equipment | A  |                       | -         | -                    | -                       | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   |
| Secondary Distribution   |    |                       |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |
| AF   |    |                       |           | -                    | -                       |           | -                    | 0.000                   |           | -                    | 0.000                   |           | -                    | 0.000                   |           | -                    | 0.000                   |           | -                    | 0.000                   |
| Subtotal: Uncategorized  |    |                       | -         | -                    | -                       | -         | -                    | 0.199                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.00                    |
| Total  |    |                       | -         | -                    | -                       | -         | -                    | 0.199                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Theater Nuclear Weapon Storage & Security System

|  |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           | oounty c      | ,,                      |                     |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|---------------------|---------------|-------------------------|
|  |          |                       | F         | Prior Year    | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | / 2018 OC     | 0                       | FY                  | ′ 2018 Tot    | tal                     |
| Item Number / Title [DODIC] Theater Nuclear WS3  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost<br>(\$ M) | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Theater Nuclear W33  |          |                       | 1         | 1             |                         | 1         |               | 1                       |           |               | 1                       | 1         |               | 1                       |           |               |                         |                     |               |                         |
| Theater Nuclear Weapon Storage and Security System (WS3) Communications Infrastructure Equipment | A        |                       | -         | -             | -                       | -         | -             | 7.163                   | -         | -             | 6.159                   | -         | -             | 24.957                  | -         | -             | 0.000                   | -                   | -             | 24.957                  |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |                     |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 7.163                   |           | -             | 6.159                   |           | -             | 24.957                  |           | -             | 0.000                   |                     | -             | 24.957                  |
| Subtotal: Theater Nuclea   | r WS3    | 3                     | -         | -             | -                       | -         | -             | 7.163                   | -         | -             | 6.159                   | -         | -             | 24.957                  | -         | -             | 0.000                   | -                   | -             | 24.957                  |
| Total  |          |                       | -         | -             | -                       | -         | -             | 7.163                   | -         | -             | 6.159                   | -         | -             | 24.957                  | -         | -             | 0.000                   | -                   | -             | 24.957                  |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7

P-1 Line Item Number / Title:

837300 / Base Comm Infrastructure

Aggregated Items Title:
Information Technology Services

Management - Other

|   |    |       |           |            |        |           |         |        |           |         |        |           |           |        | 141       | anagem    | CIII OI | 1101      |           |        |
|---|----|-------|-----------|------------|--------|-----------|---------|--------|-----------|---------|--------|-----------|-----------|--------|-----------|-----------|---------|-----------|-----------|--------|
|   |    |       | P         | Prior Year | s      |           | FY 2016 |        |           | FY 2017 |        | FY        | / 2018 Ba | se     | F         | / 2018 OC | 0       | FY        | / 2018 To | tal    |
|   |    | MDAP/ |           |            | Total  |           |         | Total  |           |         | Total  |           |           | Total  |           |           | Total   |           |           | Total  |
| Item Number /   | ID | MAIS  | Unit Cost | Qty        | Cost   | Unit Cost | Qty     | Cost   | Unit Cost | Qty     | Cost   | Unit Cost | Qty       | Cost   | Unit Cost | Qty       | Cost    | Unit Cost | Qty       | Cost   |
| Title [DODIC]   | CD | Code  | (\$ M)    | (Each)     | (\$ M) | (\$ M)    | (Each)  | (\$ M) | (\$ M)    | (Each)  | (\$ M) | (\$ M)    | (Each)    | (\$ M) | (\$ M)    | (Each)    | (\$ M)  | (\$ M)    | (Each)    | (\$ M) |
| ITSM - Other  |    |       |           |            |        |           |         |        |           |         |        |           |           |        |           |           |         |           |           |        |
| AFDW Base<br>Communications<br>Network Equipment            | A  |       | -         | -          | -      | -         | -       | 3.483  | -         | -       | 3.082  | -         | -         | 3.166  | -         | -         | 0.000   | -         | -         | 3.166  |
| Secondary Distribution                                      |    |       |           |            | •      |           |         |        |           |         |        |           |           |        |           |           |         |           |           |        |
| AF  |    |       |           | -          | -      |           | -       | 3.483  |           | -       | 3.082  |           | -         | 3.166  |           | -         | 0.000   |           | -         | 3.166  |
| AFSPC Base<br>Communications<br>Infrastructure<br>Equipment | A  |       | -         | -          | -      | -         | -       | 25.162 | -         | -       | 0.000  | -         | -         | 0.000  | -         | -         | 0.000   | -         | -         | 0.000  |
| Secondary Distribution                                      |    |       |           |            |        |           |         |        |           |         |        |           |           |        |           |           |         |           |           |        |
| AF  |    |       |           | -          | -      |           | -       | 25.162 |           | -       | 0.000  |           | -         | 0.000  |           | -         | 0.000   |           | -         | 0.000  |
| Subtotal: ITSM - Other                                      |    |       | -         | -          | -      | -         | -       | 28.645 | -         | -       | 3.082  | -         | -         | 3.166  | -         | -         | 0.000   | -         | -         | 3.166  |
| Total   |    |       | -         | -          | -      | -         | -       | 28.645 | -         | -       | 3.082  | -         | -         | 3.166  | -         | -         | 0.000   | -         | -         | 3.166  |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Aggregated Items Title:
Information Technology Services
Management - Mobility Air Forces

|  |          |                       |               |               |                         |                | I .           |                         |           |               |                         |           |               |                         |           | •             |                         | ,         |               |                         |
|--|----------|-----------------------|---------------|---------------|-------------------------|----------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | F             | Prior Year    | 's                      |                | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | Y 2018 OC     | ю                       | FY        | Y 2018 To     | tal                     |
| Item Number /<br>Title [DODIC]                             | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost     | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost      | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ITSM - Mobility AF's                                       |          |                       |               |               |                         |                |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AFDW Base<br>Communications<br>Infrastructure<br>Equipment | A        |                       | -             | -             | -                       | -              | -             | 0.000                   | -         | -             | 0.738                   | -         | -             | 0.758                   | -         | -             | 0.000                   | -         | -             | 0.758                   |
| Secondary Distribution                                     | n        |                       |               |               |                         |                |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |               | -             | -                       |                | -             | 0.000                   |           | -             | 0.738                   |           | -             | 0.758                   |           | -             | 0.000                   |           | -             | 0.758                   |
| Subtotal: ITSM - Mobility                                  | AF's     |                       | -             | -             | -                       | -              | -             | 0.000                   | -         | -             | 0.738                   | -         | -             | 0.758                   | -         | -             | 0.000                   | -         | -             | 0.758                   |
| Total  |          |                       | -             | -             | -                       | -              | -             | 0.000                   | -         | -             | 0.738                   | -         | -             | 0.758                   | -         | -             | 0.000                   | -         | -             | 0.758                   |
| Nata Cubtatala ar Ta                                       | tala ir  | a thia E              | whileit D 40a |               |                         | una assanths a |               | din a                   |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:

3080F / 03 / 7

837300 / Base Comm Infrastructure

Aggregated Items Title:

Information Technology Services Management - AFR

**Date:** May 2017

|  |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         | IVI       | anagem        | ient - Ar               | K         |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | / 2018 Bas    | se                      | FY        | / 2018 OC     | ю                       | FY        | / 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]                             | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ITSM - AFR   |          |                       |           |               |                         | ,         |               |                         |           | ,             |                         |           |               |                         |           |               |                         |           |               |                         |
| AFRC Base<br>Communications<br>Infrastructure<br>Equipment | A        |                       | -         | -             | -                       | -         | -             | 0.267                   | -         | -             | 0.327                   | -         | -             | 5.337                   | -         | -             | 0.000                   | -         | -             | 5.337                   |
| Secondary Distribution                                     |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AFR  |          |                       |           | -             | -                       |           | -             | 0.267                   |           | -             | 0.327                   |           | -             | 5.337                   |           | -             | 0.000                   |           | -             | 5.337                   |
| Subtotal: ITSM - AFR                                       |          |                       | -         | -             | -                       | -         | -             | 0.267                   | -         | -             | 0.327                   | -         | -             | 5.337                   | -         | -             | 0.000                   | -         | -             | 5.337                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 0.267                   | -         | -             | 0.327                   | -         | -             | 5.337                   | -         | -             | 0.000                   | -         | -             | 5.337                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Aggregated Items Title:
Information Technology Services
Management - ANG

|  |   | DAP/ | Р       | rior Years    | •                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
|--|---|------|---------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |   | DAP/ |         |               | •                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | ′ 2018 OC     | :0                      | F۱        | / 2018 Tot    | :al                     |
| Item Number / II Title [DODIC] C                 | _ | - 1  | it Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ITSM - ANG                                       |   | ·    | ·       | ,             |                         |           |               |                         |           |               |                         |           |               |                         |           | ·             |                         |           |               |                         |
| ANG Base Communications Infrastructure Equipment | A |      | -       | -             | -                       | -         | -             | 3.828                   | -         | -             | 58.281                  | -         | -             | 10.648                  | -         | -             | 0.000                   | -         | -             | 10.648                  |
| Secondary Distribution                           |   |      |         |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AFNG   |   |      |         | -             | -                       |           | -             | 3.828                   |           | -             | 58.281                  |           | -             | 10.648                  |           | -             | 0.000                   |           | -             | 10.648                  |
| Subtotal: ITSM - ANG                             |   |      | -       | -             | -                       | -         | -             | 3.828                   | -         | -             | 58.281                  | -         | -             | 10.648                  | -         | -             | 0.000                   | -         | -             | 10.648                  |
| Total  |   |      | -       | -             | -                       | •         | -             | 3.828                   | -         | -             | 58.281                  | -         | -             | 10.648                  | -         | -             | 0.000                   | -         | -             | 10.648                  |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Aggregated Items Title:
Information Technology Services
Management - Logistics

|  |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           | 5 -           |                         | J         |               |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | P         | Prior Year    | s                       |           | FY 2016       | ,                       |           | FY 2017       |                         | FY        | / 2018 Ba     | se                      | FY        | / 2018 OC     | o                       | FY        | 2018 To       | tal                     |
| ltem Number /<br>Title [DODIC]                             | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ITSM - Logistics   |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AFMC Base<br>Communications<br>Infrastructure<br>Equipment | A        |                       | -         | -             | -                       | -         | -             | 1.461                   | -         | -             | 1.785                   | -         | -             | 1.835                   | -         | -             | 0.000                   | -         | -             | 1.835                   |
| Secondary Distribution                                     | 1        |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 1.461                   |           | -             | 1.785                   |           | -             | 1.835                   |           | -             | 0.000                   |           | -             | 1.835                   |
| Subtotal: ITSM - Logistic                                  | s        |                       | -         | -             | -                       | -         | -             | 1.461                   | -         | -             | 1.785                   | -         | -             | 1.835                   | -         | -             | 0.000                   | -         | -             | 1.835                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 1.461                   | -         | -             | 1.785                   | -         | -             | 1.835                   | -         | -             | 0.000                   | -         | -             | 1.835                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 03 / 7

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

Aggregated Items Title:
Information Technology Services
Management - Training

|  |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017              |                         | F۱        | / 2018 Bas           | se                      | FY        | ′ 2018 OC            | :0                      | F۱        | 2018 To       | tal                     |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]                             | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| ITSM - Training  |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AETC Base<br>Communications<br>Infrastructure<br>Equipment | A        |                       | -         | -             | -                       | -         | -             | 0.627                   | -         | ı                    | 1.165                   | -         | ı                    | 1.134                   | -         | -                    | 0.000                   | -         | -             | 1.134                   |
| Secondary Distribution                                     | ,        |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 0.627                   |           | -                    | 1.165                   |           | -                    | 1.134                   |           | -                    | 0.000                   |           | -             | 1.134                   |
| Subtotal: ITSM - Training                                  |          |                       | -         | -             | -                       | -         | -             | 0.627                   | -         | -                    | 1.165                   | -         | -                    | 1.134                   | -         | -                    | 0.000                   | -         | -             | 1.134                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 0.627                   | -         | -                    | 1.165                   | -         | -                    | 1.134                   | -         | -                    | 0.000                   | -         | -             | 1.134                   |



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force Date: May 2017

0305912F, 1203699F

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

838010 / Comm Elect Mods

Equip / BSA 8: Modifications

Program Elements for Code B Items: 0305111F. 0305909F.

Other Related Program Elements: 0305111F, 0305114F, 0305909F

Line Item MDAP/MAIS Code: None

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior         |                  |                    | FY 2018          | FY 2018         | FY 2018        |                       |                       |                       |                       | То       |                        |
|--|---------------|------------------|--------------------|------------------|-----------------|----------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|------------------------|
| Resource Summary                               | Years         | FY 2016          | FY 2017            | Base             | oco             | Total          | FY 2019               | FY 2020               | FY 2021               | FY 2022               | Complete | Total                  |
| Procurement Quantity (Units in Each)           | -             | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Cost (\$ in Millions)      | 85.840        | 78.650           | 69.500             | 70.798           | 0.000           | 70.798         | 79.313 <sup>(a)</sup> | 61.384 <sup>(b)</sup> | 60.666 <sup>(c)</sup> | 57.347 <sup>(d)</sup> | -        | 563.498 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -             | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Net Procurement (P-1) (\$ in Millions)         | 85.840        | 78.650           | 69.500             | 70.798           | 0.000           | 70.798         | 79.313                | 61.384                | 60.666                | 57.347                | -        | 563.498                |
| Plus CY Advance Procurement (\$ in Millions)   | -             | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Total Obligation Authority (\$ in Millions)    | 85.840        | 78.650           | 69.500             | 70.798           | 0.000           | 70.798         | 79.313                | 61.384                | 60.666                | 57.347                | -        | 563.498                |
| (The following                                 | Resource Sumi | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget request | s are documente       | d elsewhere.)         |                       |                       |          |                        |
| Initial Spares (\$ in Millions)                | -             | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Flyaway Unit Cost (\$ in Millions)             | -             | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -             | -                | -                  | -                | -               | -              | -                     | -                     | -                     | -                     | -        | -                      |

# **Description:**

In FY17, NAS Gen4 Mod (Capability Improvement) in PE 0305137F was a new start.

In FY17, ATCALS Deployable TACAN Retrofit / Refurbishment in PE 0305114F was a new start.

FY17 funding totals include \$3.800M for Overseas Contingency Operations.

### Shared Early Warning (SEW) PE 0308699F

The Shared Early Warning System (SEWS) - SEWS provides accurate and timely ballistic missile warning information generated by space-based infrared sensors. This information is distributed to three Combatant Commands (USEUCOM, USCENTCOM, USPACOM), NATO, and multiple foreign partner nations located within each of the serviced COCOMs. U.S. forces and foreign partner nations receive missile warning data via a dedicated communications network flowing from the Centralized Distribution Facility (CDF) at Peterson AFB, CO to secondary distribution facilities located with the COCOMs and distribution hubs located in foreign partner nation operations centers. Data segregation for the foreign nation partners is maintained through the use of approved cross domain solutions with unique rule sets that reflect Office of the Secretary of Defense policy regarding the dissemination of missile warning data to foreign nations. SEWS received funding to support incremental technical upgrades to replace outdated components and accommodate newer software products.

### PAVE PAWS Block 00 Update

This effort was formerly called BPP Block 00 Update and was formerly funded in PE 0305912F. Starting FY18 it will be funded in PE 1203912F. The PAVE PHASED ARRAY WARNING SYSTEM (PAVE PAWS) is a ground based system with missions to support the Missile Correlation, Space Surveillance and Missile Defense Centers. These radars are located at Beale AFB, CA and Cod AFS, MA. The primary mission is to provide United States Strategic Command (USSTRATCOM) with credible Integrated Tactical Warning/Attack Assessment (ITW/AA) data on all Sea-Launched Ballistic Missiles (SLBMs) penetrating the coverage area and predicted impact (L&PI) data for attack assessment and response determination. The secondary mission is to provide credible data on all Inter-Continental Ballistic Missiles (ICBMs) penetrating the coverage area. The tertiary mission is to support the Space Situational Awareness (SSA) network providing near-earth satellite surveillance and tracking, reporting observational (metric), SOI on man-made satellites and maintenance of the space catalog to prevent the significantly increasing potential for collisions with national assets, including manned space platforms. The PAVE PAWS mission equipment and associated sustainment suites consist of a mix of unique, custom-built components that are increasingly more difficult to maintain due to availability of replacement parts and obsolete COTS based subsystems that are no longer supported by the original equipment manufacturers. In addition, radar transmit & receive components, processing equipment, and power distribution elements, and other radar front-end equipment are 30+ years old, highly inefficient, and require replacement. Without these replacements there is a high risk that equipment failures will cause unacceptable mission downtime in order to troubleshoot and repair.

LI 838010 - Comm Elect Mods Air Force Page 1 of 19

P-1 Line #49

**Exhibit P-40, Budget Line Item Justification:** FY 2018 Air Force **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

838010 / Comm Elect Mods

Equip / BSA 8: Modifications

**Program Elements for Code B Items:** 0305111F, 0305909F, 0305912F, 1203699F

Other Related Program Elements: 0305111F, 0305114F, 0305909F

Line Item MDAP/MAIS Code: None

ID Code (A=Service Ready, B=Not Service Ready): A

### PAVE PAWS Block 01 Update

This effort was formally called BPP Block 01 Update and was formerly funded in PE 0305912F. Starting FY18 it will be funded in PE 1203912F. The PAVE PHASED ARRAY WARNING SYSTEM (PAVE PAWS) is a ground based system with missions to support the Missile Correlation, Space Surveillance and Missile Defense Centers. These radars are located at Beale AFB, CA and Cod AFS, MA. The primary mission is to provide United States Strategic Command (USSTRATCOM) with credible Integrated Tactical Warning/Attack Assessment (ITW/AA) data on all Sea-Launched Ballistic Missiles (SLBMs) penetrating the coverage area and predicted impact (L&PI) data for attack assessment and response determination. The secondary mission is to provide credible data on all Inter-Continental Ballistic Missiles (ICBMs) penetrating the coverage area. The tertiary mission is to support the Space Situational Awareness (SSA) network providing near-earth satellite surveillance and tracking, reporting observational (metric), SOI on man-made satellites and maintenance of the space catalog to prevent the significantly increasing potential for collisions with national assets, including manned space platforms. The PAVE PAWS mission equipment and associated sustainment suites consist of a mix of unique, custom-built components that are increasingly more difficult to maintain due to availability of replacement parts and obsolete COTS based subsystems that are no longer supported by the original equipment manufacturers. In addition, radar transmit & receive components, processing equipment, and power distribution elements, and other radar front-end equipment are 30+ years old, highly inefficient, and require replacement. Without these replacements there is a high risk that equipment failures will cause unacceptable mission downtime in order to troubleshoot and repair.

### BMEWS Block 00 Update

This effort was formally called BPP Block 00 Update and was formerly funded in PE 0305909F. Starting FY18 it will be funded in PE 1203909F. The Ballistic Missile Early Warning System (BMEWS) is a ground-based radar system whose primary mission of missile warning (MW) provides United States Strategic Command (USSTRATCOM) with credible Integrated Tactical Warning/Attack Assessment (ITW/AA) data on all Intercontinental Ballistic Missiles (ICBMs) penetrating the coverage area. This data includes an estimation of launch and predicted impact (L&PI) locations and times. Additionally, BMEWS provides USSTRATCOM and other users with ITW/AA data on Sea-Launched Ballistic Missiles (SLBMs) penetrating the coverage area. The Upgraded Early Warning Radar (UEWR) sites at Thule and Fylingdales have a co-primary mission of Missile Defense (MD) supporting the Missile Defense Agency (Clear scheduled for UEWR upgrade in 2016). The secondary mission of BMEWS supports the Space Situational Awareness (SSA) mission by providing near-earth satellite surveillance, tracking and identification as required by the Joint Space Operations Center, Alternate Space Operations Center, and the National Air and Space Intelligence Center. The BMEWS consists of: Thule Air Base, Greenland; Clear Air Force Station, AK; and Royal Air Force (RAF) Fylingdales, UK. Additionally there is a fourth site for testing (System Program Agency) located in the Centralized Integration Support Facility (CISF) at Peterson AFB. CO.

### BMEWS Block 01 Update

This effort was formally called BPP Block 01 Update and was formerly funded in PE 0305909F. Starting FY18 it will be funded in PE 1203909F. The Ballistic Missile Early Warning System (BMEWS) is a ground-based radar system whose primary mission of missile warning (MW) provides United States Strategic Command (USSTRATCOM) with credible Integrated Tactical Warning/Attack Assessment (ITW/AA) data on all Intercontinental Ballistic Missiles (ICBMs) penetrating the coverage area. This data includes an estimation of launch and predicted impact (L&PI) locations and times. Additionally, BMEWS provides USSTRATCOM and other users with ITW/AA data on Sea-Launched Ballistic Missiles (SLBMs) penetrating the coverage area. The Upgraded Early Warning Radar (UEWR) sites at Thule and Fylingdales have a co-primary mission of Missile Defense (MD) supporting the Missile Defense Agency (Clear scheduled for UEWR upgrade in 2016). The secondary mission of BMEWS supports the Space Situational Awareness (SSA) mission by providing near-earth satellite surveillance, tracking and identification as required by the Joint Space Operations Center, Alternate Space Operations Center, and the National Air and Space Intelligence Center. The BMEWS consists of: Thule Air Base, Greenland; Clear Air Force Station, AK; and Royal Air Force (RAF) Fylingdales, UK. Additionally there is a fourth site for testing (System Program Agency) located in the Centralized Integration Support Facility (CISF) at Peterson AFB. CO.

|      |                            |         |         | FY 2018 | FY 2018 | FY 2018 |         |         |         |         |
|------|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ;    | Secondary Distribution     | FY 2016 | FY 2017 | Base    | oco     | Total   | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
| AF   | Quantity                   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | -       |
|      | Total Obligation Authority | 78.648  | 69.500  | 70.798  | 0.000   | 70.798  | 45.309  | 47.793  | 48.033  | 48.871  |
| AFNG | Quantity                   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | -       |
|      | Total Obligation Authority | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR  | Quantity                   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | -       |

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P-1 Line #49

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

838010 / Comm Elect Mods

Equip / BSA 8: Modifications

Modifications

6360 TO / COMMIT Elect Mods

ID Code (A=Service Ready, B=Not Service Ready): A

**Program Elements for Code B Items:** 0305111F, 0305909F, 0305912F, 1203699F

Other Related Program Elements: 0305111F, 0305114F, 0305909F

Line Item MDAP/MAIS Code: None

| Secondar               | ry Distribution            | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
|                        | Total Obligation Authority | 0.000   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | -       |
| Secondary Distribution | Total Obligation Authority | 78.648  | 69.500  | 70.798          | 0.000          | 70.798           | 45.309  | 47.793  | 48.033  | 48.871  |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications

838010 / Comm Elect Mods

Equip / BSA 8: Modifications

**Program Elements for Code B Items:** 0305111F, 0305909F, 0305912F, 1203699F

Other Related Program Elements: 0305111F, 0305114F, 0305909F

Line Item MDAP/MAIS Code: None

ID Code (A=Service Ready, B=Not Service Ready): A

|   | Exhibits Schedule  |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|---|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type   | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a   | Weather Service  |             |          |                       | - / 6.756                                | - / 5.850                                | - / 6.974                                | - / 9.155                                | - / 0.000                                | - / 9.155                                |
| P-5   | Weather Service  |             | В        |                       | - / -                                    | - /2.640                                 | - / 1.672                                | - /1.000                                 | - / -                                    | - / 1.000                                |
| P-40a   | Air Traffic Control, Approach, and Landing System (ATCALS)   |             |          |                       | - / 37.903                               | - /3.980                                 | - / 12.323                               | - / 2.646                                | - / 0.000                                | - / 2.646                                |
| P-3a  | 1 / NAS Gen4 MOD (Capability Improvement)  |             |          |                       | - / -                                    | - / -                                    | - / 1.519                                | - / 12.718                               | - / 0.000                                | - / 12.718                               |
| P-40a   | Ballistic Missile Early Warning System (BMEWS)   |             |          |                       | - /41.181                                | - / 59.108                               | - / 29.610                               | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a   | Ballistic Missile Early Warning System (BMEWS)   |             |          |                       | - / -                                    | - / 6.850                                | - / -                                    | - / -                                    | - / -                                    | - / -                                    |
| P-40a   | Submarine-Launched Ballistic Missile (SLBM) Radar Warning System   |             |          |                       | - / 0.000                                | - / 0.000                                | - / 16.999                               | - / 0.000                                | - / 0.000                                | - / 0.000                                |
| P-40a   | Shared Early Warning (SEW)   |             |          |                       | - / 0.000                                | - / 0.220                                | - / 0.403                                | - / 0.392                                | - / 0.000                                | - / 0.392                                |
| P-40a   | Ballistic Missile Early Warning System (BMEWS)   |             |          |                       | - / -                                    | - / -                                    | - / -                                    | - /20.079                                | - / -                                    | - /20.079                                |
| P-40a   | Ballistic Missile Early Warning System (BMEWS)   |             |          |                       | - / 0.000                                | - / 0.000                                | - / 0.000                                | - /5.600                                 | - / 0.000                                | - / 5.600                                |
| P-40a   | Submarine-Launched Ballistic Missile (SLBM) Radar Warning System   |             |          |                       | - / 0.000                                | - / 0.000                                | - / 0.000                                | - / 9.904                                | - / 0.000                                | - / 9.904                                |
| P-40a   | Submarine-Launched Ballistic Missile (SLBM) Radar Warning System   |             |          |                       | - / -                                    | - / -                                    | - / -                                    | - / 9.304                                | - / -                                    | - / 9.304                                |
| P-40  | Total Gross/Weapon System Cost   |             |          | ,                     | - / 85.840                               | - / 78.650                               | - / 69.500                               | - / 70.798                               | - / 0.000                                | - / 70.798                               |
|   | Exhibits Schedule  |             |          |                       | FY 2019                                  | FY 2020                                  | FY 2021                                  | FY 2022                                  | To Complete                              | Total                                    |
| Exhibit<br>Type   | Title*   |             | ID       | MDAP/<br>MAIS         |  |  |  |  |  |  |
|   | Title  | Subexhibits | CD       | Code                  | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a   | Weather Service  | Subexhibits | CD       |                       |  |  |  |  |  |  |
| P-40a<br>P-5  |  | Subexhibits | B        |                       | (Each) I (\$ M)                          |
|   | Weather Service  | Subexhibits |          |                       | (Each) I (\$ M)                          |
| P-5   | Weather Service Weather Service  | Subexhibits |          |                       | (Each) I (\$ M)                          |
| P-5<br>P-40a  | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)   | Subexhibits |          |                       | (Each) I (\$ M) -                        |
| P-5<br>P-40a<br>P-3a  | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)  1 / NAS Gen4 MOD (Capability Improvement)  | Subexhibits |          |                       | (Each) I (\$ M) -                        |
| P-5<br>P-40a<br>P-3a<br>P-40a   | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)  1 / NAS Gen4 MOD (Capability Improvement)  Ballistic Missile Early Warning System (BMEWS)  | Subexhibits |          |                       | (Each) I (\$ M)  -                       | (Each) I (\$ M) -                        |
| P-5<br>P-40a<br>P-3a<br>P-40a<br>P-40a  | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)  1 / NAS Gen4 MOD (Capability Improvement) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS)  | Subexhibits |          |                       | (Each) I (\$ M)  -                       | (Each) I (\$ M) -                        |
| P-5<br>P-40a<br>P-3a<br>P-40a<br>P-40a<br>P-40a                                     | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS) 1 / NAS Gen4 MOD (Capability Improvement) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS) Submarine-Launched Ballistic Missile (SLBM) Radar Warning System  | Subexhibits |          |                       | (Each) I (\$ M)  -                       | (Each) I (\$ M) -                        |
| P-5<br>P-40a<br>P-3a<br>P-40a<br>P-40a<br>P-40a<br>P-40a                            | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)  1 / NAS Gen4 MOD (Capability Improvement) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS) Submarine-Launched Ballistic Missile (SLBM) Radar Warning System Shared Early Warning (SEW)  | Subexhibits |          |                       | (Each) I (\$ M)  -                       |
| P-5<br>P-40a<br>P-3a<br>P-40a<br>P-40a<br>P-40a<br>P-40a<br>P-40a                   | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)  1 / NAS Gen4 MOD (Capability Improvement) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS) Submarine-Launched Ballistic Missile (SLBM) Radar Warning System Shared Early Warning (SEW) Ballistic Missile Early Warning System (BMEWS)   | Subexhibits |          |                       | (Each) I (\$ M)  -                       |
| P-5<br>P-40a<br>P-3a<br>P-40a<br>P-40a<br>P-40a<br>P-40a<br>P-40a<br>P-40a          | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)  1 / NAS Gen4 MOD (Capability Improvement) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS) Submarine-Launched Ballistic Missile (SLBM) Radar Warning System Shared Early Warning (SEW) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS)  | Subexhibits |          |                       | (Each) I (\$ M)  -                       |
| P-5<br>P-40a<br>P-3a<br>P-40a<br>P-40a<br>P-40a<br>P-40a<br>P-40a<br>P-40a<br>P-40a | Weather Service Weather Service Air Traffic Control, Approach, and Landing System (ATCALS)  1 / NAS Gen4 MOD (Capability Improvement) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS) Submarine-Launched Ballistic Missile (SLBM) Radar Warning System Shared Early Warning (SEW) Ballistic Missile Early Warning System (BMEWS) Ballistic Missile Early Warning System (BMEWS) Submarine-Launched Ballistic Missile (SLBM) Radar Warning System | Subexhibits |          |                       | (Each) I (\$ M)  -                       |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

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P-1 Line #49

| Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force                 |                               | Date: May 2017 |
|---|-------------------------------|----------------|
| Appropriation / Budget Activity / Budget Sub Activity:                          | P-1 Line Item Number / Title: |                |
| 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications | 838010 / Comm Elect Mods      |                |
| Equip / BSA 8: Modifications  |                               |                |

Program Elements for Code B Items: 0305111F. 0305909F. ID Code (A=Service Ready, B=Not Service Ready): A 0305912F, 1203699F

Other Related Program Elements: 0305111F, 0305114F, 0305909F

Line Item MDAP/MAIS Code: None

### Justification:

Where applicable, justification for individual modifications is provided in the P-3A exhibits and also below.

### PAVE PAWS Block 00 Update

This effort was formerly called BPP Block 00 Update and was formerly funded in PE 0305912F. Starting FY18 it will be funded in PE 1203912F. FY18 will fund ongoing program management administrative costs supporting PAVE PAWS modification efforts and will fund Capital Equipment Replacement of unsupportable mission and support equipment and initial spares to include, but not limited to, sub-array power supplies (SAPS) and associated components. Due to the limited spares demand rates, and indefinite system lifespan, Life of Type buys may be required to support this weapon system.

### PAVE PAWS Block 01 Update

This effort was formally called BPP Block 01 Update and was formerly funded in PE 0305912F. Starting FY18 it will be funded in PE 1203912F. FY18 will fund ongoing program management administrative costs supporting PAVE PAWS modification efforts and will fund Capital Equipment Replacement of unsupportable mission and support equipment and initial spares to include, but not limited to, array group drivers (AGDs) and associated components. Due to the limited spares demand rates, and indefinite system lifespan. Life of Type buys may be required to support this weapon system.

### BMEWS Block 00 Update

This effort was formally called BPP Block 00 Update and was formerly funded in PE 0305909F. Starting FY18 it will be funded in PE 1203909F. FY18 will fund ongoing program management administrative costs supporting BMEWS modification efforts and will fund Capital Equipment Replacement of unsupportable mission and support equipment and initial spares to include, but not limited to, sub-array power supplies (SAPS) and associated components. Due to the limited spares demand rates, and indefinite system lifespan, Life of Type buys may be required to support this weapon system.

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This effort was formally called BPP Block 01 Update and was formerly funded in PE 0305909F. Starting FY18 it will be funded in PE 1203909F. FY18 will fund ongoing program management administrative costs supporting BMEWS modification efforts and will fund Capital Equipment Replacement of unsupportable mission and support equipment and initial spares to include, but not limited to, array group drivers (AGDs) and associated components. Due to the limited spares demand rates, and indefinite system lifespan. Life of Type buys may be required to support this weapon system.

Efforts with funding starting in FY 2019 through FY 2022 are summarized on the P-40. Not all details of this funding are included in this P-40 exhibit set. A summary of the excepted details is as follows:

- (a) FY 2019 Cost Delta: 79.313 million
- (b) FY 2020 Cost Delta: 61.384 million
- (c) FY 2021 Cost Delta: 60.666 million
- (d) FY 2022 Cost Delta: 57.347 million
- (e) FY Total Cost Delta: 563.498 million

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Modification Items Title:

3080F / 03 / 8

838010 / Comm Elect Mods

Weather Service

|  |          |                       | F         | Prior Years   | s                       |           | FY 2016       |                         |           | FY 2017              |                         | F۱        | / 2018 Ba            | se                      | F١        | / 2018 OC            | 0                       | FY        | 2018 Tot      | tal                     |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| 08-001 / AN/FMQ-7<br>Solar Optical Observing<br>Network (SOON)                             |          |                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | 1.000                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |                      | ,                       |           |                      |                         |           |                      |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | -                    | 1.000                   |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |
| 09-001 / AN/UMQ-13<br>MARK IV-B  |          |                       | -         | -             | 6.756                   | -         | -             | 0.000                   | -         | -                    | 1.000                   | -         | -                    | 1.500                   | -         | -                    | -                       | -         | -             | 1.50                    |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |                      | ,                       |           |                      |                         |           |                      |                         | ,         |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 0.000                   |           | -                    | 1.000                   |           | -                    | 1.500                   |           | -                    | -                       |           | -             | 1.50                    |
| 14-001 / Next Generation<br>Radar (NEXRAD)<br>WSR-88D IT Refresh                           |          |                       | -         | -             | -                       | -         | -             | 2.750                   | -         | -                    | 3.508                   | -         | -                    | 4.732                   | -         | -                    | -                       | -         | -             | 4.73                    |
| Secondary Distribution   |          |                       |           | ,             |                         |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 2.750                   |           | -                    | 3.508                   |           | -                    | 4.732                   |           | -                    | -                       |           | -             | 4.73                    |
| 14-007 / Radio Solar<br>Telescope Network<br>Service Life Extension<br>Program (RSTN SLEP) |          |                       | -         | -             | -                       | -         | -             | 3.100                   | -         | -                    | -                       | -         | -                    | 0.800                   | -         | -                    | -                       | -         | -             | 0.80                    |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |                      | ,                       |           |                      |                         |           |                      |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 3.100                   |           | -                    | -                       |           | -                    | 0.800                   |           | -                    | -                       |           | -             | 0.80                    |
| 16-001 / Joint<br>Environmental Toolkit<br>(JET) Refresh                                   |          |                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | 1.466                   | -         | -                    | 2.123                   | -         | -                    | -                       | -         | -             | 2.12                    |
| Secondary Distribution   |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | -                    | 1.466                   |           | -                    | 2.123                   |           | -                    | -                       |           | -             | 2.12                    |
| Total  |          |                       | -         | -             | 6.756                   | -         | -             | 5.850                   | -         | -                    | 6.974                   | _         | _                    | 9.155                   | -         | -                    | 0.000                   | -         | _             | 9.15                    |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

## **Modification Information:**

| Item Number / Title   | Models of Systems Affected | Modification Type      |
|---|----------------------------|------------------------|
| 08-001 / AN/FMQ-7 Solar Optical<br>Observing Network (SOON)                             | ANFMQ7                     | Capability Improvement |
| 09-001 / AN/UMQ-13 MARK IV-B  | ANUMQ13                    | Capability Improvement |
| 14-001 / Next Generation Radar<br>(NEXRAD) WSR-88D IT Refresh                           | WSR-88D                    | Capability Improvement |
| 14-007 / Radio Solar Telescope<br>Network Service Life Extension<br>Program (RSTN SLEP) | ANFRR95, AF24U1            | Capability Improvement |
| 16-001 / Joint Environmental Toolkit<br>(JET) Refresh                                   | JET                        | Capability Improvement |

| Exhibit P-5, Cost   | Analysis            | : FY 20     | 18 Air F        | orce            |              |               |               |                             |               |             |              |         | Da       | te: Ma | y 2017                      |                |            |               |
|---|---------------------|-------------|-----------------|-----------------|--------------|---------------|---------------|-----------------------------|---------------|-------------|--------------|---------|----------|--------|-----------------------------|----------------|------------|---------------|
| <b>Appropriation / E</b><br>3080F / 03 / 8                  | Budget Ad           | ctivity /   | Budget          | Sub Acti        | vity:        |               |               | <b>Number</b><br>nm Elect N |               |             |              |         |          |        | <b>nber / T</b><br>er Servi | itle [DO<br>ce | DIC]:      |               |
| ID Code (A=Service Rea                                      | ıdy, B=Not Servi    | ce Ready) : | В               |                 |              |               |               |                             | M             | DAP/MAIS    | S Code:      |         |          |        |                             |                |            |               |
|   | Resource            | Summ        | ary             |                 | P            | Prior Yea     | ars           | FY 20                       | 16            | FY          | 2017         | FY 201  | 8 Base   | FY     | 2018 C                      | СО             | FY 2018    | Total         |
| Procurement Quantity (Ur.                                   | nits in Each)       |             |                 |                 |              |               | -             |                             | -             |             | -            |         | _        |        |                             | -              |            |               |
| Gross/Weapon System C                                       |                     | s)          |                 |                 |              |               | -             |                             | 2.640         |             | 1.67         | 2       | 1.00     | 0      |                             | -              |            | 1.000         |
| Less PY Advance Procure                                     | ement (\$ in Mill   | ions)       |                 |                 |              |               | -             |                             | -             |             | _            |         | -        |        |                             | -              |            | _             |
| Net Procurement (P-1) (\$                                   | in Millions)        |             |                 |                 |              |               | -             |                             | 2.640         |             | 1.67         | 2       | 1.00     | 0      |                             | -              |            | 1.000         |
| Plus CY Advance Procure                                     | ement (\$ in Mill   | ions)       |                 |                 |              |               | -             |                             | -             |             | -            |         | -        |        |                             | -              |            | -             |
| Total Obligation Authori                                    | ity (\$ in Millions | )           |                 |                 |              |               | -             |                             | 2.640         |             | 1.67         | 2       | 1.00     | 0      |                             | -              |            | 1.000         |
| (7  | The following F     | Resource Si | ummary row      | vs are for info | rmational pu | irposes only  | y. The corres | ponding budg                | et request    | s are docum | ented elsewh | nere.)  |          |        |                             | '              |            |               |
| Initial Spares (\$ in Millions)                             |                     |             | -               |                 |              |               | -             |                             | -             |             | -            | 1       | -        |        |                             | -              |            | -             |
| Gross/Weapon System U                                       |                     | fillions)   |                 |                 |              |               | -             |                             | -             |             | -            |         | -        |        |                             | -              |            | -             |
|   |                     |             |                 |                 |              |               |               |                             |               |             |              | 1       |          |        |                             |                |            |               |
| Note: Subtotals or Totals                                   | in this Exhibit     | P-5 may no  | ot be exact o   | or sum exactly  | due to rour  | nding.        |               |                             |               |             |              | '       |          |        |                             |                |            |               |
|   | P                   | rior Years  | 3               |                 | FY 2016      |               |               | FY 2017                     |               | F           | Y 2018 Bas   | е       | FY 20    | 018 OC | )                           | F              | Y 2018 Tot | al            |
| Cost Elements   | Unit Cost           | Qty         | Total<br>Cost   | Unit Cost       | Qty          | Total<br>Cost | Unit Cost     | Qty                         | Total<br>Cost | Unit Cost   | Qty          |         |          | Qty    | Total<br>Cost               | Unit Cost      | Qty        | Total<br>Cost |
| Hardware - Weather Service                                  | (\$ M)              | (Each)      | (\$ M)          | (\$ M)          | (Each)       | (\$ M)        | (\$ M)        | (Each)                      | (\$ M)        | (\$ M)      | (Each)       | (\$ M)  | (\$ M) ( | Each)  | (\$ M)                      | (\$ M)         | (Each)     | (\$ M)        |
| Non Recurring Cost  | COSI                |             |                 |                 |              |               |               |                             |               |             |              |         |          |        |                             |                |            |               |
| Weather Data Analysis                                       | s -                 | -           | -               | -               | -            | 2.457         | -             | -                           | 1.486         | -           | -            | 0.810   | -        | -      |                             | -              | -          | 0.81          |
| Subtotal: Non Recurring<br>Cost                             | -                   | -           | -               | -               | -            | 2.457         | -             | -                           | 1.486         | -           | -            | 0.810   | -        | -      | -                           | -              | -          | 0.81          |
| Subtotal: Hardware -<br>Weather Service Cost                | -                   | -           | -               | -               | -            | 2.457         | -             | -                           | 1.486         | -           | -            | 0.810   | -        | -      | -                           | -              | -          | 0.81          |
| Support - Weather Service C                                 | Cost                |             |                 |                 |              |               |               |                             |               |             |              |         |          |        |                             |                |            |               |
| PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENT SERVICES | -                   | -           | -               | -               | -            | 0.183         | -             | -                           | 0.186         | -           | -            | 0.190   | -        | -      | -                           | -              | -          | 0.19          |
| Subtotal: Support - Weather<br>Service Cost                 | -                   | -           | -               | -               | -            | 0.183         | -             | -                           | 0.186         | -           | -            | 0.190   | -        | -      | -                           | -              | -          | 0.19          |
| Gross/Weapon System<br>Cost                                 | -                   | -           | -               | -               | -            | 2.640         | -             | -                           | 1.672         | -           | -            | 1.000   | -        | -      | -                           | -              | -          | 1.00          |
|   | Cook                | and and Di  | -4ib4i          |                 |              |               | FV            | 2046                        |               | EV 2047     |              | FY 2018 |          |        | Y 2018                      |                | FY 201     |               |
|   | Seco                |             | stribution      | ı               |              |               | гт            | 2016                        | -             | FY 2017     | _            | Base    | -        |        | осо                         | _              | Total      | _             |
| ۸Ε  |                     | Qua         | riuty           |                 |              |               |               | 2.64                        | n             |             | 1.672        |         | 1.000    |        |                             | -              |            | 1.000         |
| AF  |                     | Tota        | A Obligation A  | \uthority       |              |               |               |                             | <b>∪</b>      |             | 1.012        |         | 1.000    |        |                             | - 1            |            | 1.000         |
| AF Total:   |                     |             | al Obligation A | Authority       |              |               |               | _                           |               |             | -            |         | -        |        |                             | -              |            | -             |

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P-1 Line #49

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

3080F / 03 / 8

P-1 Line Item Number / Title: 838010 / Comm Elect Mods

**Aggregated Modification Items Title:** Air Traffic Control, Approach, and

Landing System (ATCALS)

**Date:** May 2017

|  |    |                       |           |               |                         |           |                      |                         |           |               |                         |           |                      |                         |           |               | ,, στσ (                | THOMEO    | ,                    |                         |
|--|----|-----------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|
|  |    |                       | Р         | rior Years    | 3                       |           | FY 2016              |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba            | se                      | FY        | 2018 OC       | 0                       | FY        | 2018 To              | tal                     |
| Item Number / Title  | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| AN/GRN-29 Instrument<br>Landing System /<br>ATCALS AN/GRN-29<br>Instrument Landing<br>System (PE 0305114F) |    |                       | -         | -             | 37.903                  | -         | -                    | 3.219                   | -         | -             | 7.121                   | -         | -                    | 1.006                   | -         | -             | -                       | -         | -                    | 1.000                   |
| Secondary Distribution   | ,  |                       |           |               |                         |           |                      |                         | •         |               | ,                       |           |                      |                         |           | ,             | ,                       |           |                      |                         |
| AF   |    |                       |           | -             | -                       |           | -                    | 3.219                   |           | -             | 7.121                   |           | -                    | 1.006                   |           | -             | -                       |           | -                    | 1.006                   |
| AFNG   |    |                       |           | -             | -                       |           | -                    | 0.000                   |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | -                    | -                       |
| AFR  |    |                       |           | -             | -                       |           | -                    | 0.000                   |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | -                    | -                       |
| ATCALS / Deployable<br>TACAN Retrofit/<br>Refurbishment  |    |                       | -         | -             | -                       | -         | -                    | -                       | -         | -             | 3.800                   | -         | -                    | -                       | -         | -             | -                       | -         | -                    | -                       |
| Secondary Distribution   |    |                       |           |               |                         |           |                      |                         |           |               | ,                       |           |                      |                         |           | ,             | ,                       |           |                      |                         |
| AF   |    |                       |           | -             | -                       |           | -                    | -                       |           | -             | 3.800                   |           | -                    | -                       |           | -             | -                       |           | -                    | -                       |
| P-3A Low Cost Mods /<br>ATCALS Low Cost Mods<br>(PE 0305114F)  |    |                       | -         | -             | -                       | -         | -                    | 0.761                   | -         | -             | 1.402                   | -         | -                    | 1.640                   | -         | -             | -                       | -         | -                    | 1.64                    |
| Secondary Distribution   |    |                       |           |               |                         |           |                      |                         |           |               |                         | ,         |                      |                         |           | ,             |                         |           |                      |                         |
| AF   |    |                       |           | -             | -                       |           | -                    | 0.761                   |           | -             | 1.402                   |           | -                    | 1.640                   |           | -             | -                       |           | -                    | 1.64                    |
| Total  |    |                       | _         | _             | 37.903                  | _         | -                    | 3.980                   | _         | _             | 12.323                  | _         | _                    | 2.646                   | _         | _             | 0.000                   | _         | _                    | 2.646                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

## **Modification Information:**

| Item Number / Title   | Models of Systems Affected | Modification Type             |
|---|----------------------------|-------------------------------|
| AN/GRN-29 Instrument Landing<br>System / ATCALS AN/GRN-29<br>Instrument Landing System (PE<br>0305114F) | GRN-29                     | Capability Improvement        |
| ATCALS / Deployable TACAN Retrofit/<br>Refurbishment  | TRN-48                     | Reliability & Maintainability |
| P-3A Low Cost Mods / ATCALS Low<br>Cost Mods (PE 0305114F)  | ATCALS                     | Reliability & Maintainability |

Exhibit P-3a, Individual Modification: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: **Modification Number / Title:** 3080F / 03 / 8 838010 / Comm Elect Mods 1 / NAS Gen4 MOD

| ID Code (A=Service Ready, B=Not Service Ready) |                |                  |                    |                  |                  |                  |                 |                | MDAP/MAIS Code: |         |                |       |  |  |  |  |
|--|----------------|------------------|--------------------|------------------|------------------|------------------|-----------------|----------------|-----------------|---------|----------------|-------|--|--|--|--|
| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017            | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021         | FY 2022 | To<br>Complete | Total |  |  |  |  |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                | -               | -              | -               | -       | -              | -     |  |  |  |  |
| Gross/Weapon System Cost (\$ in Millions)      | -              | -                | 1.519              | 12.718           | 0.000            | 12.718           | -               | -              | -               | -       | -              | -     |  |  |  |  |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -               | -       | -              | -     |  |  |  |  |
| Net Procurement (P-1) (\$ in Millions)         | -              | -                | 1.519              | 12.718           | 0.000            | 12.718           | -               | -              | -               | -       | -              | -     |  |  |  |  |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -               | -       | -              | -     |  |  |  |  |
| Total Obligation Authority (\$ in Millions)    | -              | -                | 1.519              | 12.718           | 0.000            | 12.718           | -               | -              | -               | -       | -              | -     |  |  |  |  |
| (The following                                 | Resource Sum   | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |                 | :       |                |       |  |  |  |  |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                | -               | -              | -               | -       | -              | -     |  |  |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                | =               | -              | -               | -       | -              | -     |  |  |  |  |

### **Description:**

The Gen 4 equipment is being procured as a centrally managed commodity procurement as part of the National Airspace System (NAS) system. NAS system configuration is centrally managed commodity procurement as part of the National Airspace System (NAS) system. the Federal Aviation Administration which has system engineering responsibility for the NAS. The National Airspace System (NAS) Gen 4 Modification continues mitigation of diminishing manufacturing source issues for the NAS program which has transitioned to the Operational Support Phase. Over its 15 year production/implementation phase, NAS was fielded in multiple hardware configurations and software builds. Current NAS processors and associated network equipment have gone end of life. The NAS Gen4 modification establishes standard hardware and software configurations and ensures continued system supportability and availability. Configuration consolidation also reduces multiple, simultaneous efforts associated with system software development and test while reducing cost outlays.

### JUSTIFICATION:

FY18 funds will procure 4 upgrade kits (4 AD/0 ANG/0 AFR).

Milestone/Development Status

Modification kits have already been kit proofed by FAA and are available off FAA contract.

| Secon                  | dary Distribution          | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | 1.519   | 12.718          | 0.000          | 12.718           | -       | -       | -       | -       |
| AFNG                   | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | 0.000   | 0.000           | -              | 0.000            | -       | -       | -       | -       |
| AFR                    | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
|                        | Total Obligation Authority | -       | 0.000   | 0.000           | -              | 0.000            | -       | -       | -       | -       |
| Total:                 | Quantity                   | -       | -       | -               | -              | -                | -       | -       | -       | -       |
| Secondary Distribution | Total Obligation Authority | -       | 1.519   | 12.718          | 0.000          | 12.718           | -       | -       | -       | -       |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force              |   | Date: May 2017                                |
|---|---|---|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8 | P-1 Line Item Number / Title:<br>838010 / Comm Elect Mods | Modification Number / Title: 1 / NAS Gen4 MOD |
| ID Co. J.   | MDAD/MAIO O   | •   |

| ID Code (A=Service Ready, B=Not Service Ready):   |                                   |                                   |                                   |                                   | MD                                | AP/MAIS Co                        | ode:                              |                                   |                                   |                                   |                                   |                              |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------|
| Models of Systems Affected: NASMod                | -1                                | Modif                             | ication Typ                       | <b>oe:</b> Capabil                | lity Improve                      | ement                             | Re                                | lated RDT                         | &E PEs:                           |                                   |                                   |                              |
|   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                        |
| Financial Plan                                    | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each)<br>Total Cost (\$ |
| Procurement                                       |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                              |
| Modification Item 1 of 1: DAAS G4 Retrofit        |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                              |
| B Kits  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                              |
| Recurring   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   | _                            |
| DAAS G4 Retrofit:EQUIPMENT Group B (Active)       | - / -                             | - 1 -                             | 4 / 1.319 (1)                     | 4 / 12.398                        | - 1 -                             | 4 / 12.398                        | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                          |
| DAAS G4 Retrofit:EQUIPMENT Group B (Guard)        | - 1 -                             | - 1 -                             | - /0.000                          | - /0.000                          | - 1 -                             | - /0.000                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                          |
| DAAS G4 Retrofit:EQUIPMENT Group B (Reserve)      | - 1 -                             | - 1 -                             | - /0.000                          | - /0.000                          | - / -                             | - /0.000                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                          |
| Subtotal: Recurring                               | - / -                             | - / -                             | - /1.319                          | - /12.398                         | - / -                             | - /12.398                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                          |
| Subtotal: DAAS G4 Retrofit                        | - / -                             | - / -                             | - /1.319                          | - /12.398                         | - / -                             | - /12.398                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                          |
| Subtotal: Procurement, All Modification Items     | - / -                             | - / -                             | - /1.319                          | - /12.398                         | - / -                             | - /12.398                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                          |
| Support (All Modification Items)                  |                                   |                                   |                                   | <u> </u>                          | <u> </u>                          |                                   |                                   | <u> </u>                          | <u> </u>                          | <u> </u>                          | <u> </u>                          |                              |
| GROUP B: TOTAL NONRECURRING                       | - 1 -                             | - 1 -                             | - /0.000                          | - / 0.000                         | - /0.000                          | - /0.000                          | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                          |
| Subtotal: Support                                 | - / -                             | - / -                             | - /0.000                          | - /0.000                          | - /0.000                          | - /0.000                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - /                          |
| Installation                                      |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                              |
| Modification Item 1 of 1: DAAS G4 Retrofit        | - / -                             | - 1 -                             | 4 / 0.200                         | 4 / 0.320                         | - 1 -                             | 4 / 0.320                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1                          |
| Subtotal: Installation                            | - / -                             | - / -                             | 4 / 0.200                         | 4/0.320                           | - / -                             | 4/0.320                           | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                        |
| Total   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                              |
| Total Cost (Procurement + Support + Installation) | -                                 | -                                 | 1.519                             | 12.718                            | 0.000                             | 12.718                            | -                                 | -                                 | -                                 | -                                 | -                                 |                              |

Exhibit P-3a, Individual Modification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3080F / 03 / 8

P-1 Line Item Number / Title:
838010 / Comm Elect Mods

1 / NAS Gen4 MOD

MDAP/MAIS Code:

Modification Item 1 of 1: DAAS G4 Retrofit

### Manufacturer Information

| Manufacturer Name: Rayth    | heon         |         |         | Manufacturer Location: Manufacturer Location: Manufacturer | arlborough, MA |         |         |
|-----------------------------|--------------|---------|---------|--|----------------|---------|---------|
| Administrative Leadtime (ii | n Months): 4 |         |         | Production Leadtime (in N                                  | fonths): 5     |         |         |
| Dates                       | FY 2016      | FY 2017 | FY 2018 | FY 2019  | FY 2020        | FY 2021 | FY 2022 |

| Dates          | FY 2016 | FY 2017  | FY 2018  | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|----------------|---------|----------|----------|---------|---------|---------|---------|
| Contract Dates |         | Feb 2017 | Feb 2018 |         |         |         |         |
| Delivery Dates |         | Jul 2017 | Jul 2018 |         |         |         |         |

### Installation Information

Method of Implementation: Contract Field Team

|                   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                             |
|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Installation Cost | Qty (Each) I<br>Total Cost (\$ M) |
| Prior Years       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2016           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - / -                             |
| FY 2017           | - 1 -                             | - 1 -                             | 4 / 0.200                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2018           | - 1 -                             | - 1 -                             | - 1 -                             | 4 / 0.320                         | - 1 -                             | 4 / 0.320                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2019           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2020           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2021           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| FY 2022           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| To Complete       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - / -                             | - 1 -                             | - 1 -                             |
| Total             | - 1 -                             | - 1 -                             | 4 / 0.200                         | 4 / 0.320                         | - 1 -                             | 4 / 0.320                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |

### Installation Schedule

|     |     |    | FY 2 | 2016 |    |    | FY 2 | 2017 |    |    | FY 2 | 2018 |    |    | FY 2 | 2019 |    |    | FY 2 | 2020 |    |    | FY 2 | 2021 |    |    | FY 2 | 022 |    |    |     |
|-----|-----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|-----|----|----|-----|
|     | PYS | Q1 | Q2   | Q3   | Q4 | Q1 | Q2   | Q3  | Q4 | тс | Tot |
| In  | 0   | -  | -    | -    | -  | -  | -    | -    | 4  | -  | -    | -    | 4  | -  | -    | -    | 2  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -   | -  | 0  | 10  |
| Out | 0   | -  | -    | -    | -  | -  | -    | -    | 4  | -  | -    | -    | 4  | -  | -    | -    | 2  | -  | -    | -    | -  | -  | -    | -    | -  | -  | -    | -   | -  | 0  | 10  |

### Footnotes:

LI 838010 - Comm Elect Mods Air Force UNCLASSIFIED

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<sup>(1)</sup> Unit cost in FY17 is lower than unit cost in FY18 through FY19 as FY17 kits are for 4 Enhanced Local Integrated Tower Equipment (ELITE) mod kits which is a smaller system than the Gen 4 system kits being procured in FY18/19 for the much larger radar approach control facilities.

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

**Appropriation / Budget Activity / Budget Sub Activity:** 3080F / 03 / 8

P-1 Line Item Number / Title: 838010 / Comm Elect Mods

**Aggregated Modification Items Title:**Ballistic Missile Early Warning System (BMEWS)

**Date:** May 2017

|   |    |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY                                      | ′ 2018 Ba     | se                      | FY        | / 2018 OC     | 0                       | FY        | 2018 Tot      | al                      |
|---|----|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|---|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title   | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost                               | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| COBRA DANE Radar<br>Mod / COBRA DANE<br>Radar Mod                           |    |                       | -         | -             | -                       | -         | -             | 0.150                   | -         | -             | -                       | -                                       | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Secondary Distribution  |    |                       |           |               |                         |           | •             |                         |           |               |                         | *************************************** |               |                         |           |               | •                       |           |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | 0.150                   |           | -             | -                       |   | -             | -                       |           | -             | -                       |           | -             | -                       |
| Mod HEMP / Mod HEMP   |    |                       | -         | -             | -                       | -         | -             | 49.000                  | -         | -             | -                       | -                                       | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Secondary Distribution  |    |                       |           |               |                         |           |               |                         |           |               |                         |   |               |                         |           |               | ,                       |           |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | 49.000                  |           | -             | -                       |   | -             | -                       |           | -             | -                       |           | -             | -                       |
| P-3A BMEWS DP/SP<br>Suite Replacement /<br>BMEWS DP/SP Suite<br>Replacement |    |                       | -         | -             | 37.616                  | -         | -             | 9.858                   | -         | -             | 29.610                  | -                                       | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Secondary Distribution  |    |                       |           |               |                         |           | ,             |                         |           |               |                         |   |               |                         |           |               | ,                       |           |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | 9.858                   |           | -             | 29.610                  |   | -             | -                       |           | -             | -                       |           | -             | -                       |
| P-3A BMEWS<br>Modification / BMEWS<br>Modification                          |    |                       | -         | -             | 3.565                   | -         | -             | 0.100                   | -         | -             | -                       | -                                       | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Secondary Distribution  |    |                       |           |               |                         |           |               |                         |           |               |                         |   |               |                         |           |               |                         | •         |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | 0.100                   |           | -             | -                       |   | -             | -                       |           | -             | -                       |           | -             | -                       |
| Total   |    |                       | -         | -             | 41.181                  | -         | -             | 59.108                  | -         | -             | 29.610                  | -                                       | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

## **Modification Information:**

| Item Number / Title  | Models of Systems Affected | Modification Type             |
|--|----------------------------|-------------------------------|
| COBRA DANE Radar Mod / COBRA<br>DANE Radar Mod                           | NA                         | Reliability & Maintainability |
| Mod HEMP / Mod HEMP  | NA                         | Reliability & Maintainability |
| P-3A BMEWS DP/SP Suite<br>Replacement / BMEWS DP/SP Suite<br>Replacement | Raytheon                   | Reliability & Maintainability |
| P-3A BMEWS Modification / BMEWS Modification                             | NA                         | Reliability & Maintainability |

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P-1 Line #49

| Exhibit P-40a, Budget Item Justification For Aggregated It            | ems: FY 2018 Air Force                                    | Date: May 2017   |
|---|---|--|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8 | P-1 Line Item Number / Title:<br>838010 / Comm Elect Mods | Aggregated Items Title: Ballistic Missile Early Warning System (BMEWS) |

|                                |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017              |                         | FY        | ′ 2018 Bas           | se                      | FY        | / 2018 OC     | ю.                      | FY        | 2018 Tot             | tal                     |
|--------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) |
| Radar                          |          |                       | ,         |               |                         |           |               |                         |           |                      |                         |           | ,                    |                         |           |               | ,                       |           |                      |                         |
| Radar Reliability              | Α        |                       | -         | -             | -                       | -         | -             | 6.850                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -                    | -                       |
| Secondary Distribution         | 1        |                       |           |               | ,                       |           |               |                         |           |                      |                         | ,         |                      |                         |           |               | •                       |           |                      |                         |
| AF                             |          |                       |           | -             | -                       |           | -             | 6.850                   |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |           | -                    | -                       |
| Subtotal: Radar                |          |                       | -         | -             | -                       | -         | -             | 6.850                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -                    | -                       |
| Total                          |          |                       | -         | -             | -                       | -         | -             | 6.850                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       | -         | -                    | -                       |

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

3080F / 03 / 8

P-1 Line Item Number / Title:

838010 / Comm Elect Mods

**Aggregated Modification Items Title:** Submarine-Launched Ballistic Missile

(SLBM) Radar Warning System

**Date:** May 2017

|   |    |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba            | se                      | F         | / 2018 OC            | 0                       | FY        | ' 2018 Tot    | tal                     |
|---|----|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title   | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| P-3A PARCS<br>Modifications / P-3A<br>PARCS Modification<br>(formerly PARCS PARSS)                    |    |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.750                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| Secondary Distribution  |    |                       | ,         |               |                         |           | •             |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | -                       |           | -             | 0.750                   |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |
| P-3A PAVE PAWS<br>Modifications / P-3A<br>PAVE PAWS Modification<br>(formerly PAVE PAWS<br>Front End) |    |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 1.553                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| Secondary Distribution  |    | ,                     |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | -                       |           | -             | 1.553                   |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |
| PARCS Block 00 Update /<br>PARCS Block 00 Update  |    |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 4.240                   | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| Secondary Distribution  |    |                       |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | -                       |           | -             | 4.240                   |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |
| PAVE PAWS Block 00<br>Update / BPP Block 00<br>SAPS ES  |    |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 10.456                  | -         | -                    | -                       | -         | -                    | -                       | -         | -             | -                       |
| Secondary Distribution  |    |                       |           |               | •                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |
| AF  |    |                       |           | -             | -                       |           | -             | -                       |           | -             | 10.456                  |           | -                    | -                       |           | -                    | -                       |           | -             | -                       |
| Total   |    |                       | -         | -             | 0.000                   | -         | -             | 0.000                   | -         | -             | 16.999                  | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

### **Modification Information:**

| Ite                         | m Number / Title  | Models of Systems Affected | Modification Type             |
|-----------------------------|---|----------------------------|-------------------------------|
|                             | Modifications / P-3A<br>ification (formerly PARCS                 | Exelis                     | Reliability & Maintainability |
|                             | PAWS Modifications / P-3A<br>Modification (formerly<br>Front End) | NA                         | Reliability & Maintainability |
| PARCS Block<br>Block 00 Upo | k 00 Update / PARCS<br>late                                       | Exelis                     | Reliability & Maintainability |
| PAVE PAWS<br>Block 00 SAF   | Block 00 Update / BPP<br>PS ES                                    | NA                         | Reliability & Maintainability |

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>838010 / Comm Elect ModsAggregated Modification Items Title:<br/>Shared Early Warning (SEW)

|  |    |                       | Р         | rior Year            | s                       |           | FY 2016              |                         |           | FY 2017              |                         | FY        | ′ 2018 Bas           | se                      | FY        | / 2018 OC            | :0                      | F         | / 2018 Tot    | tal                     |
|--|----|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title  | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| SEWS1 / Shared Early<br>Warning System (SEWS)<br>Low Cost Mods |    |                       | -         | -                    | -                       | -         | -                    | 0.220                   | -         | -                    | 0.403                   | -         | -                    | 0.392                   | -         | -                    | 0.000                   | -         | -             | 0.392                   |
| Secondary Distribution   |    |                       |           |                      | ,                       |           |                      |                         |           |                      |                         | ,         |                      |                         | ,         |                      |                         | ,         |               |                         |
| AF   |    |                       |           | -                    | -                       |           | -                    | 0.220                   |           | -                    | 0.403                   |           | -                    | 0.392                   |           | -                    | 0.000                   |           | -             | 0.392                   |
| Total  |    |                       | -         | -                    | 0.000                   | -         | -                    | 0.220                   | -         | -                    | 0.403                   | -         | -                    | 0.392                   | -         | -                    | 0.000                   | -         | -             | 0.392                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### **Modification Information:**

| Item Number / Title                                      | Models of Systems Affected | Modification Type             |
|--|----------------------------|-------------------------------|
| SEWS1 / Shared Early Warning System (SEWS) Low Cost Mods | SEWS                       | Reliability & Maintainability |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8

P-1 Line Item Number / Title:

838010 / Comm Elect Mods

Aggregated Items Title:
Ballistic Missile Early Warning System

(BMEWS)

|                                |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         | \-        | /IVIL V V O ) | <b>'</b>                |           |               |                         |
|--------------------------------|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                |          |                       | Р         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | ′ 2018 OC     | 0                       | FY        | ′ 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| BMEWS BLOCK 00                 |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| BMEWS BLOCK 00                 | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 12.879                  | -         | -             | -                       | -         | -             | 12.879                  |
| Secondary Distribution         |          |                       |           |               |                         |           | •             |                         |           |               |                         |           |               | •                       | ,         |               | •                       |           |               |                         |
| AF                             |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 12.879                  |           | -             | -                       |           | -             | 12.879                  |
| Subtotal: BMEWS BLOCK          | ( 00     |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 12.879                  | -         | -             | -                       | -         | -             | 12.879                  |
| BMEWS BLOCK 01                 |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| BMEWS BLOCK 01                 | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 7.200                   | -         | -             | -                       | -         | -             | 7.200                   |
| Secondary Distribution         |          |                       |           |               |                         |           | ,             |                         | ,         | ,             |                         |           |               |                         |           |               | ,                       |           |               |                         |
| AF                             |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 7.200                   |           | -             | -                       |           | -             | 7.200                   |
| Subtotal: BMEWS BLOCK          | ( 01     |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 7.200                   | -         | -             | -                       | -         | -             | 7.200                   |
| Total                          |          |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 20.079                  | -         | -             | -                       | -         | -             | 20.079                  |

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

P-1 Line Item Number / Title:

3080F / 03 / 8

838010 / Comm Elect Mods

**Aggregated Modification Items Title:**Ballistic Missile Early Warning System

(BMEWS)

**Date:** May 2017

|                            |    |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         | (L        | olvi⊏vv <i>3)</i>  |                         |           |               |                         |
|----------------------------|----|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|--------------------|-------------------------|-----------|---------------|-------------------------|
|                            |    |                       | Р         | rior Year     | 'S                      |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Ba       | se                      | FY        | <sup>2018</sup> OC | :O                      | FY        | / 2018 To     | tal                     |
| Item Number / Title        | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each)      | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| BMEWS / BMEWS DP SP        |    |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.500                   | -         | -                  | -                       | -         | -             | 0.500                   |
| Secondary Distribution     |    |                       |           |               | •                       |           |               |                         |           |               |                         |           |               |                         |           |                    |                         |           |               |                         |
| AF                         |    |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 0.500                   |           | -                  | -                       |           | -             | 0.500                   |
| BMEWS2 / BMEWS Block<br>02 |    |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 5.100                   | -         | -                  | -                       | -         | -             | 5.100                   |
| Secondary Distribution     |    |                       |           |               | •                       | •         |               |                         |           |               |                         |           |               |                         |           |                    |                         |           |               |                         |
| AF                         |    |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 5.100                   |           | -                  | -                       |           | -             | 5.100                   |
| Total                      |    |                       | -         | -             | 0.000                   | -         | -             | 0.000                   | _         | -             | 0.000                   | -         | _             | 5.600                   | _         | -                  | 0.000                   | _         | _             | 5.600                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

### **Modification Information:**

| Item Number / Title     | Models of Systems Affected | Modification Type             |
|-------------------------|----------------------------|-------------------------------|
| BMEWS / BMEWS DP SP     | NA                         | Reliability & Maintainability |
| BMEWS2 / BMEWS Block 02 | NA                         | Reliability & Maintainability |

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

**Appropriation / Budget Activity / Budget Sub Activity:** 3080F / 03 / 8

P-1 Line Item Number / Title:

838010 / Comm Elect Mods

Aggregated Modification Items Title: Submarine-Launched Ballistic Missile (SLBM) Radar Warning System

**Date:** May 2017

|                               |    |                       |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         | 1 '       | -             |                         |           |               |                         |
|-------------------------------|----|-----------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                               |    |                       | Р         | rior Year            | s                       |           | FY 2016              |                         |           | FY 2017              |                         | FY        | ′ 2018 Ba            | se                      | F`        | Y 2018 OC     | 0                       | F         | / 2018 Tot    | tal                     |
| Item Number / Title           | ID | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| PARCSB0 / PARCS Block<br>00   |    |                       | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | 9.104                   | -         | -             | -                       | -         | -             | 9.104                   |
| Secondary Distribution        |    |                       |           |                      |                         |           |                      |                         |           | ,                    |                         |           |                      |                         |           |               |                         |           |               |                         |
| AF                            |    |                       |           | -                    | -                       |           | -                    | -                       |           | -                    | -                       |           | -                    | 9.104                   |           | -             | -                       |           | -             | 9.104                   |
| PARCSB1 / PARCS Block<br>01   |    |                       | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | 0.500                   | -         | -             | -                       | -         | -             | 0.500                   |
| Secondary Distribution        |    |                       |           |                      |                         |           |                      |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |
| AF                            |    |                       |           | -                    | -                       |           | -                    | -                       |           | -                    | -                       |           | -                    | 0.500                   |           | -             | -                       |           | -             | 0.500                   |
| PPB02 / Pave Paws Block<br>02 |    |                       | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | -                       | -         | -                    | 0.300                   | -         | -             | -                       | -         | -             | 0.300                   |
| Secondary Distribution        |    |                       |           |                      |                         |           |                      |                         |           |                      |                         | •         |                      |                         |           |               | ,                       |           |               | ,                       |
| AF                            |    |                       |           | -                    | -                       |           | -                    | -                       |           | -                    | -                       |           | -                    | 0.300                   |           | -             | -                       |           | -             | 0.300                   |
| Total                         |    |                       | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 0.000                   | -         | -                    | 9.904                   | -         | -             | 0.000                   | -         | -             | 9.904                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

### **Modification Information:**

| Item Number / Title        | Models of Systems Affected | Modification Type             |
|----------------------------|----------------------------|-------------------------------|
| PARCSB0 / PARCS Block 00   | NA                         | Reliability & Maintainability |
| PARCSB1 / PARCS Block 01   | NA                         | Reliability & Maintainability |
| PPB02 / Pave Paws Block 02 | NA                         | Reliability & Maintainability |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Aggregated Items Title:

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8

P-1 Line Item Number / Title:

838010 / Comm Elect Mods

Submarine-Launched Ballistic Missile (SLBM) Radar Warning System

|                                |             |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         | ,         |               |                         |           |               |                         |
|--------------------------------|-------------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                | Prior Years |                       |           | 's            |                         | FY 2016   |               |                         | FY 2017   |                      | FY                      | / 2018 Ba | se                   | F                       | Y 2018 OC | 0             | FY                      | 2018 To   | tal           |                         |
| Item Number /<br>Title [DODIC] | ID<br>CD    | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| PAVE PAWS BLOCK 00             |             |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |
| PAVE PAWS BLOCK<br>00          | A           |                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       | -         | -                    | 4.504                   | -         | -             | -                       | -         | -             | 4.504                   |
| Secondary Distribution         |             |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               | _                       |
| AF                             |             |                       |           | -             | -                       |           | -             | -                       |           | -                    | -                       |           | -                    | 4.504                   |           | -             | -                       |           | -             | 4.504                   |
| Subtotal: PAVE PAWS BL         | оск         | 00                    | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       | -         | -                    | 4.504                   | -         | -             | -                       | -         | -             | 4.504                   |
| PAVE PAWS BLOCK 01             |             |                       |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |
| PAVE PAWS BLOCK<br>01          | А           |                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       | -         | -                    | 4.800                   | -         | -             | -                       | -         | -             | 4.800                   |
| Secondary Distribution         |             |                       |           | •             |                         |           |               |                         |           |                      |                         |           |                      |                         | ,         | ,             | •                       |           |               |                         |
| AF                             |             |                       |           | -             | -                       |           | -             | -                       |           | -                    | -                       |           | -                    | 4.800                   |           | -             | -                       |           | -             | 4.800                   |
| Subtotal: PAVE PAWS BL         | оск         | 01                    | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       | -         | -                    | 4.800                   | -         | -             | -                       | -         | -             | 4.800                   |
| Total                          |             |                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       | -         | -                    | 9.304                   | -         | -             | -                       | -         | -             | 9.304                   |



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

P-1 Line Item Number / Title: 842140 / Night Vision Goggles

Support Equip / BSA 2: Personal Safety & Rescue Equip

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #50

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior        |                  |                   | FY 2018           | FY 2018          | FY 2018        |                 |               |         |         | То       |       |
|--|--------------|------------------|-------------------|-------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|-------|
| Resource Summary                               | Years        | FY 2016          | FY 2017           | Base              | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total |
| Procurement Quantity (Units in Each)           | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 5.950            | 0.000             | 0.000             | 0.000            | 0.000          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 5.950 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Net Procurement (P-1) (\$ in Millions)         | -            | 5.950            | 0.000             | 0.000             | 0.000            | 0.000          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 5.950 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Total Obligation Authority (\$ in Millions)    | -            | 5.950            | 0.000             | 0.000             | 0.000            | 0.000          | 0.000           | 0.000         | 0.000   | 0.000   | -        | 5.950 |
| (The following                                 | Resource Sum | mary rows are fo | r informational p | ourposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |       |
| Initial Spares (\$ in Millions)                | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                 | -                 | -                | -              | -               | -             | -       | -       | -        | -     |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                 | -                 | -                | =              | -               | -             | -       | -       | -        | -     |

### **Description:**

FY16 funding includes \$3.580M appropriated for Overseas Contingency Operations (Guardian Angel Fusion Goggle-Enhanced).

Modern warfare resulted in an increase in airborne combat under the cover of darkness. Night missions include ground operations, preparation of the aircraft for take-off and landings in complete darkness, lightsoff air refueling, and visual identification of enemy targets hidden under the night sky. Consequently, ground personnel and aircrew require the capability to see in very low visibility conditions at night and high ambient light conditions such as full moon or heavily lighted residential areas. The use of Night Vision Goggles (NVG) is critical for combat rescue, special operations, and homeland security missions.

A lack of night vision capability would significantly decrease combat effectiveness in night operations, risk flight safety, and increase the probability of fratricide. Aircraft such as HH-60 helicopters, HC-130s, F-16s, and special mission C-130s primarily operate in low altitude environments during covert night operations. Hence, NVGs are vital to the success of these missions, providing a dramatic increase in safety. situational awareness, and survivability during the execution of near daytime tactics, including visual formation criteria. Furthermore, the proliferation of NVG-equipped adversaries underscores the urgent need to supply ground and air forces with night vision equipment.

Funding for this exhibit contained in Program Elements (PEs) 0702833F, 0207227F, and 0207588F.

Ground crew Goggles:

AN/PVS-14 Ground crew Goggle: This monocular night vision device is a hand-held, head-mounted, helmet-mounted, or weapon-mounted night vision system, which enables walking, weapon firing, short-range surveillance, map reading, vehicle maintenance, and first-aid administration during moonlight and starlight conditions. The AN/PVS-14 supports a vast spectrum of ground and air operations to include aircraft maintenance, civil engineering, emergency response, security, and other missions.

AN/PVS-15 Ground crew Goggle: This binocular NVG is a helmet-mounted or hand-held night vision system, which is primarily used by Special Forces during night drop operations. The AN/PVS-15 can be used for all nighttime ground operations. An added benefit of this particular binocular goggle is the back-up capability in the event one of the two tubes fails.

Guardian Angel Fusion Goggle - Enhanced (FGE): The FGE is a helmet mounted dual waveband goggle which will increase identification and discrimination of combatants in most battlefield conditions and light levels through the use of image intensification fused with thermal imagery. Continued procurement of systems are required for combat rescue until the next generation of multi-spectral NVGs are developed

LI 842140 - Night Vision Goggles Air Force

UNCLASSIFIED Page 1 of 2

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date: May 2017** 

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

842140 / Night Vision Goggles

P-1 Line Item Number / Title:

Support Equip / BSA 2: Personal Safety & Rescue Equip

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

and available for ground crew operators. Due to rapidly changing threat environment, the acquisition program manager has the authority to redirect funding as necessary to meet current slated and emerging requirements.

### Aircrew Goggles:

AN/AVS-9 (F4949G-TG) Aircrew Goggle: This night vision goggle provides aircraft and ground personnel with the capability to see the horizon, terrain features and enemy ground fire, thereby reducing the potential for air-to-ground fratricide and mid-air collisions during night operations. The AN/AVS-9 (F4949-TG) is a light-weight, helmet-mounted goggle equipped with pinnacle tube technology that mitigates effects of sudden bright light exposure.

### Test Sets:

ANV-20/20 Test Set, Infinity Focus: The ANV-20/20 is a portable instrument, which allows quick and accurate evaluation and adjustment of all goggle parameters. All NVGs require operational checkout.

ANV-126A Test Set, Infrared Viewer: The ANV-126A is a commercial upgrade to the ANV-126, which is suitable for field operational checks and depot level NVG maintenance. This test set provides accurate checks for NVG resolution, gain, power drain, binocular goggle collimation, image quality, and image distortion. The ANV-126A uses state of the art technology and provides enhanced capabilities to the user.

ANV-126A-UGF Test Set, Time Compliance Technical Order (TCTO) Kit: The ANV-126A-UGF is a commercial TCTO kit that converts the ANV-126 to the ANV-126A Test Set.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), capabilities under this line item are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and military support to civil authorities. Projected allocations for reserve component requirements are subject to total force demand priorities.

Note: All funding and tasks from FY17-FY21 have been moved to Project 842990. Items Less than \$5 Million.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 195     | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 4.995   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG                   | Quantity                   | 184     | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.716   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 63      | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.239   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 442     | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 5.950   | 0.000   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |

#### Justification:

All funding and tasks from FY17-FY21 have been moved to Project 842990. Items Less than \$5 Million

LI 842140 - Night Vision Goggles Air Force

UNCLASSIFIED Page 2 of 2

P-1 Line #50

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

842990 / Items Less Than \$5 Million

Support Equip / BSA 2: Personal Safety & Rescue Equip

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207227F, 0604706F

Line Item MDAP/MAIS Code: N/A

| Ellic Relli MDAI /MAIO GGGC: 14//              |              |                  |                    |                  |                  |                |                 |               |         |         |          |         |
|--|--------------|------------------|--------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| _  | Prior        |                  |                    | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
| Resource Summary                               | Years        | FY 2016          | FY 2017            | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 73.030           | 71.016             | 52.964           | 8.469            | 61.433         | 52.276          | 51.016        | 47.998  | 180.953 | -        | 537.722 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 73.030           | 71.016             | 52.964           | 8.469            | 61.433         | 52.276          | 51.016        | 47.998  | 180.953 | -        | 537.722 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 73.030           | 71.016             | 52.964           | 8.469            | 61.433         | 52.276          | 51.016        | 47.998  | 180.953 | -        | 537.722 |
| (The following                                 | Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         | ĺ        |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |

### Description:

Air Force

This program provides a wide variety of base support and safety of flight items for warfighters with worldwide application.

Procures safety and rescue equipment for increased protection of aircrew personnel operating manned, non-space aircraft to optimize weapon system effectiveness and capability throughout the full spectrum of military operations. In general, the purpose of the PE is to expand the combat capabilities of a weapon system an airman supports while balancing functionality, comfort, and safety. Representative items include flight helmets, oxygen breathing equipment, flame resistant/retardant and blast/ballistic protective gear, laser eye protection, personnel locator beacons, nuclear flash blindness devices, personnel parachutes, ejection seats/equipment, survival radios, associated test sets, life rafts, life preservers, anti-exposure coveralls, aircrew flight ensembles, and other air/ground crew equipment.

#### Guardian Angel Family of Systems:

LI 842990 - Items Less Than \$5 Million

Guardian Angel is an Air Force non-aircraft weapon system within the overarching Battlefield Airman Modernization Program. Guardian Angel is a family of systems based on human and equipment capabilities formulated to execute Air Force Combat Search and Rescue and personnel recovery across a full spectrum of military operations. Guardian Angel family of systems is employed by three distinct Air Force Specialties: Pararescuemen (PJ), Survival, Evasion, Resistance, and Escape (SERE) and Combat Rescue Officer (CRO). Representative items include but are not limited to parachute equipment, technical recovery equipment, information management systems, enhanced night vision systems, rescue watercraft and a Live Virtual Constructive (LVC) Training Simulator (simulator, maintenance & mobile shelter costs) to supplement, augment, and optimize current training events, independent of aircraft availability to align with strategic plans of the Next Generation LVC for training within the DoD. The enhanced night vision systems will include continued Procurement of Night Vision solutions that improve personnel recovery night visions systems with wider field of view, lower SWAP, and/or enhanced vision in at least one spectral band other than Near-IR. Procurement is required to meet mission needs until the next generation of multi-spectral NVGs are developed and available for ground crew operators. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements. This includes applicable training, spares, and repairs. Starting FY17 and thereafter, all funding and tasks for BPAC 842140 Night Vision Goggles have been moved to BPAC 842990 Items Less than \$5 Million. This funding request will support potential DMS and obsolescence solutions to include if optimal, life of type buys or bridge buys limited to the program of record quantity. Due to rapidly changing threat environment, the acquisition program manager has the authority to redirect funding as necessary to meet current slated and emerging requirements.

Special Tactics/Combat Control Battlefield Airmen program funds Air Force standardized equipment within the overarching Battlefield Airmen Modernization program for Special Tactics combat controllers. pararescue personnel, combat weather operators and tactical air control parties to perform their Air Force Special Operations Command Mission. Funding for this effort is in program element 0408011F. Representative items include but are not limited to training and simulators, assault zone, airfield marking tools, approach landing capability, weather data collection and analysis, personnel and technical recovery

UNCLASSIFIED

P-1 Line #51

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

Support Equip / BSA 2: Personal Safety & Rescue Equip

842990 / Items Less Than \$5 Million

P-1 Line Item Number / Title:

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207227F, 0604706F

Line Item MDAP/MAIS Code: N/A

equipment, visual augmentation, unmanned capabilities, aerial insertion, ground transportation, and maritime. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements. This includes applicable training, spares, and repairs to manage, execute, and deliver Special Tactics weapon system capability. This funding request will support potential DMS and obsolescence solutions, to include if optimal, life of type buys or bridge buys limited to the program of record quantity. This program element may include necessary civilian pay expenses required to manage, execute, and deliver Special Tactics weapon system capability. Due to the rapidly changing threat environment, the acquisition program manager has the authority to redirect funding as necessary to meet current slated and emerging requirements.

Modern warfare resulted in an increase in airborne combat under the cover of darkness. Night missions include ground operations, preparation of the aircraft for take-off and landings in complete darkness, lights-off air refueling, and visual identification of enemy targets hidden under the night sky. Consequently, ground personnel and aircrew require the capability to see in very low visibility conditions at night and high ambient light conditions such as full moon or heavily lighted residential areas. The use of Night Vision Goggles (NVG) is critical for combat rescue, special operations, and homeland security missions.

A lack of night vision capability would significantly decrease combat effectiveness in night operations, risk flight safety, and increase the probability of fratricide. Aircraft such as HH-60 helicopters, HC-130s, F-16s, and special mission C-130s primarily operate in low altitude environments during covert night operations. Hence, NVGs are vital to the success of these missions, providing a dramatic increase in safety, situational awareness, and survivability during the execution of near daytime tactics, including visual formation criteria. Furthermore, the proliferation of NVG-equipped adversaries underscores the urgent need to supply ground and air forces with night vision equipment.

Ground crew Goggles:

AN/PVS-14 Ground crew Goggle: This monocular night vision device is a hand-held, head-mounted, helmet-mounted, or weapon-mounted night vision system, which enables walking, weapon firing, short-range surveillance, map reading, vehicle maintenance, and first-aid administration during moonlight and starlight conditions. The AN/PVS-14 supports a vast spectrum of ground and air operations to include aircraft maintenance, civil engineering, emergency response, security, and other missions.

AN/PVS-15 Ground crew Goggle: This binocular NVG is a helmet-mounted or hand-held night vision system, which is primarily used by Special Forces during night drop operations. The AN/PVS-15 can be used for all nighttime ground operations. An added benefit of this particular binocular goggle is the back-up capability in the event one of the two tubes fails.

AN/PVS-31A Ground Crew Goggle: This binocular night vision device (BNVD) is a helmet-mounted or handheld, battery operated night vision goggle that allows for observation and target identification under adverse conditions including light rain, light snow, and low light. The system amplifies ambient light so that the viewed scene becomes clearly visible to the operator. The BNVD is a follow-on to our legacy, battle proven AN/PVS-15, but offers more features for increased survivability. Rotating binocular design allows low profile against helmet when in stowed position and ability to use as a single monocular.

Aircrew Goggles:

AN/AVS-9 (F4949G-TG) Aircrew Goggle: This night vision goggle provides aircraft and ground personnel with the capability to see the horizon, terrain features and enemy ground fire, thereby reducing the potential for air-to-ground fratricide and mid-air collisions during night operations. The AN/AVS-9 (F4949-TG) is a light-weight, helmet-mounted goggle equipped with pinnacle tube technology that mitigates effects of sudden bright light exposure.

Test Sets:

ANV-20/20 Test Set, Infinity Focus: The ANV-20/20 is a portable instrument, which allows quick and accurate evaluation and adjustment of all goggle parameters. All NVGs require operational checkout.

ANV-126A Test Set, Infrared Viewer: The ANV-126A is a commercial upgrade to the ANV-126, which is suitable for field operational checks and depot level NVG maintenance. This test set provides accurate checks for NVG resolution, gain, power drain, binocular goggle collimation, image quality, and image distortion. The ANV-126A uses state of the art technology and provides enhanced capabilities to the user.

ANV-126A-UGF Test Set, Time Compliance Technical Order (TCTO) Kit: The ANV-126A-UGF is a commercial TCTO kit that converts the ANV-126 to the ANV-126A Test Set.

LI 842990 - Items Less Than \$5 Million Air Force

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P-1 Line #51

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

842990 / Items Less Than \$5 Million

Support Equip / BSA 2: Personal Safety & Rescue Equip

0429907 Items Less Than \$5 Millio

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207227F, 0604706F

Line Item MDAP/MAIS Code: N/A

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), capabilities under this line item are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and military support to civil authorities. Projected allocations for reserve component requirements are subject to total force demand priorities.

Funding for this exhibit contained in PEs 0207227F, 0207433F, 0408011F, 0503113F and 0702833F.

Projected allocations for component requirements are subject to total force demands and priorities.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 17,126  | 2,984   | 3,201           | 870            | 4,071            | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 73.030  | 70.389  | 52.521          | 8.469          | 60.990           | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG                   | Quantity                   | 0       | 71      | 31              | 0              | 31               | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.499   | 0.328           | 0.000          | 0.328            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 0       | 21      | 11              | 0              | 11               | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.128   | 0.114           | 0.000          | 0.114            | 0.000   | 0.000   | 0.000   | 0.000   |
|                        | Quantity                   | 17,126  | 3,076   | 3,243           | 870            | 4,113            | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 73.030  | 71.016  | 52.964          | 8.469          | 61.433           | 0.000   | 0.000   | 0.000   | 0.000   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 2: Personal Safety & Rescue Equip

842990 / Items Less Than \$5 Million

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0207227F, 0604706F

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-5             | Guardian Angel                 | P-5a        | Α        |                       | - / -                                    | - / 11.924                               | - / 28.317                               | - / 25.635                               | - / -                                    | - / 25.635                               |
| P-40a           | Items Less Than \$5 Million    |             |          |                       | - / -                                    | - / 61.106                               | - / 42.699                               | - / 27.329                               | - / 8.469                                | - / 35.798                               |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 73.030                               | - / 71.016                               | - / 52.964                               | - / 8.469                                | - / 61.433                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

This program, Items Less Than \$5 Million P-40A Item Next Generation Ejection Seat, is a new start.

FY18 procurement dollars procure Aircrew Flight Equipment, Life Support Systems, Ground Crew Equipment, and Guardian Angel equipment. Funds may be used to address associated emerging requirements and short-notice Diminishing Manufacturing and Material Shortage (DMSMS) issues.

The FY2016 OCO funding total of \$3.407M in PE 53133F supports the restock/resupply of mission equipment currently being used in Horn of Africa (HOA) and continued integration of GAWS systems into HC-130 and HH-60 Communications/Rescue systems.

The FY2018 OCO funding total of \$8.769M supports the procurement of 870 AN/PVS 31A Night Vision Goggles for AMC

UNCLASSIFIED

P-1 Line #51

Exhibit P-5, Cost Analysis: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 04 / 2

P-1 Line Item Number / Title:
842990 / Items Less Than \$5 Million

Date: May 2017

Item Number / Title [DODIC]:
- / Guardian Angel

| ID Code (A=Service Ready, B=Not Service Ready): A        |                             | M                        | DAP/MAIS Code:             |              |             |               |
|--|-----------------------------|--------------------------|----------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                  | FY 2017                    | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | -                        | -                          | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 11.924                   | 28.317                     | 25.635       | -           | 25.635        |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                        | -                          | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 11.924                   | 28.317                     | 25.635       | -           | 25.635        |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                        | -                          | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)              | -                           | 11.924                   | 28.317                     | 25.635       | -           | 25.635        |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reques | ts are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                        | -                          | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | -                        | -                          | -            | -           | -             |

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

|   | P         | rior Years    | 3                       |           | FY 2016       |                         |           | FY 2017              |                         | F۱        | / 2018 Bas           | se                      | F۱        | / 2018 OC     | 0                       | FY        | ′ 2018 Tot    | .al                     |
|---|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
| Cost Elements   | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Hardware - Guardian Angel C                                       | ost       |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |
| Recurring Cost  |           |               |                         |           |               |                         |           |                      |                         |           |                      |                         |           |               |                         |           |               |                         |
| Aerial Insertion<br>Equipment                                     | -         | -             | -                       | 0.004     | 1,343         | 5.775                   | 0.007     | 2,258                | 15.129                  | 0.045     | 23                   | 1.028                   | -         | -             | -                       | 0.045     | 23            | 1.02                    |
| Technical Recovery<br>Equipment                                   | -         | -             | -                       | 0.006     | 197           | 1.221                   | 0.088     | 39                   | 3.416                   | 0.079     | 75                   | 5.888                   | -         | -             | -                       | 0.079     | 75            | 5.88                    |
| Medical Equipment   | -         | -             | -                       | -         | -             | -                       | 0.025     | 1                    | 0.025                   | 0.025     | 1                    | 0.025                   | -         | -             | -                       | 0.025     | 1             | 0.02                    |
| Maritime Rescue<br>Equipment                                      | -         | -             | -                       | 0.021     | 16            | 0.339                   | 0.025     | 1                    | 0.025                   | 0.025     | 1                    | 0.025                   | -         | -             | -                       | 0.025     | 1             | 0.02                    |
| Information<br>Management<br>Equipment                            | -         | -             | -                       | 0.004     | 553           | 2.267                   | 0.025     | 1                    | 0.025                   | 0.015     | 372                  | 5.580                   | -         | -             | -                       | 0.015     | 372           | 5.58                    |
| SERE  | -         | -             | -                       | -         | -             | -                       | 0.021     | 37                   | 0.777                   | 0.025     | 1                    | 0.025                   | -         | -             | -                       | 0.025     | 1             | 0.02                    |
| Guardian Angel<br>Enhanced Night Vision<br>Systems <sup>(†)</sup> | -         | -             | -                       | -         | -             | -                       | 0.034     | 192                  | 6.451                   | 0.035     | 304                  | 10.549                  | -         | -             | -                       | 0.035     | 304           | 10.54                   |
| PMA Contractor<br>Services  | -         | -             | -                       | -         | -             | 2.322                   | -         | -                    | 2.469                   | -         | -                    | 2.515                   | -         | -             | -                       | -         | -             | 2.51                    |
| Subtotal: Recurring Cost  | -         | -             | -                       | -         | -             | 11.924                  | -         | -                    | 28.317                  | -         | -                    | 25.635                  | -         | -             | -                       | -         | -             | 25.63                   |
| Subtotal: Hardware -<br>Guardian Angel Cost                       | -         | -             | -                       | -         | -             | 11.924                  | -         | -                    | 28.317                  | -         | -                    | 25.635                  | -         | -             | -                       | -         | -             | 25.63                   |
| Gross/Weapon System<br>Cost                                       | -         | -             | -                       | -         | -             | 11.924                  | -         | -                    | 28.317                  | -         | -                    | 25.635                  | -         | -             | -                       | -         | -             | 25.63                   |

Remarks:

| Exhibit P-5, Cost Analysis: FY 2018 Air Force          |                                      | Date: May 2017               |
|--|--------------------------------------|------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity: | P-1 Line Item Number / Title:        | Item Number / Title [DODIC]: |
| 3080F / 04 / 2   | 842990 / Items Less Than \$5 Million | - / Guardian Angel           |

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Guardian Angel weapon system capability.

| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 11.924  | 28.317  | 25.635          | -              | 25.635           |
| Total:                 | Quantity                   | -       | -       | -               | =              | -                |
| Secondary Distribution | Total Obligation Authority | 11.924  | 28.317  | 25.635          | -              | 25.635           |

<sup>(†)</sup> indicates the presence of a P-5a

| Exhibit P-5a, Procurement History and Planning: FY 2018 A | Air Force                            | Date: May 2017               |
|---|--------------------------------------|------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:    | P-1 Line Item Number / Title:        | Item Number / Title [DODIC]: |
| 3080F / 04 / 2  | 842990 / Items Less Than \$5 Million | - / Guardian Angel           |

| Cost Elements                                   | 0<br>C<br>0 | FY   | Contractor and Location | Method/Type<br>or<br>Funding Vehicle | Location of PCO | Award<br>Date | Date<br>of First<br>Delivery | Qty<br>(Each) | Unit Cost | Specs<br>Avail<br>Now? | Revision | RFP Issue<br>Date |
|---|-------------|------|-------------------------|--------------------------------------|-----------------|---------------|------------------------------|---------------|-----------|------------------------|----------|-------------------|
| Guardian Angel Enhanced Night<br>Vision Systems |             | 2017 | TBD / TBD               | MIPR                                 | TBD             | Mar 2017      | Jul 2017                     | 192           | 0.034     | Y                      |          |                   |
| Guardian Angel Enhanced Night<br>Vision Systems |             | 2018 | TBD / TBD               | MIPR                                 | TBD             | Mar 2018      | Jul 2018                     | 304           | 0.035     | Y                      |          |                   |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

942000 / Itama Laga Than \$5 Million

Aggregated Items Title:

| 3080F / 04 / 2   |    |                       |           |               |                         |           | 101110 =0     | ess Than                | ΨΟ 171    |               |                         |           |               |                         | <u> </u>  | \$5 Million   |                         |           |               |               |
|--|----|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|---------------|
|  |    |                       | Pı        | rior Years    | S                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | FY        | 2018 OC       | :O                      | FY        | 2018 Tot      | al            |
| Item Number /<br>Title [DODIC]                                   | ID | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost |
| afety, Rescue Equipmen   | nt |                       |           |               |                         |           | ,             |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| PMA (Life Support)<br>Other Government<br>Cost                   | A  |                       | -         | -             | -                       | -         | -             | 0.994                   | -         | -             | 0.831                   | -         | -             | 0.855                   | -         | -             | -                       | -         | -             | 3.0           |
| Secondary Distribution   |    |                       |           |               |                         |           | ·             |                         |           |               |                         |           | ,             |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | -             | -                       |           | -             | 0.994                   |           | -             | 0.831                   |           | -             | 0.855                   |           | -             | -                       |           | -             | 0.            |
| Life Support<br>Equipment  | Α  |                       | -         | -             | -                       | -         | -             | 0.500                   | -         | -             | 0.599                   | -         | -             | 2.875                   | -         | -             | -                       | -         | -             | 2.            |
| Secondary Distribution   |    |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | -             | -                       |           | -             | 0.500                   |           | -             | 0.599                   |           | -             | 2.875                   |           | -             | -                       |           | -             | 2.            |
| Aircrew Flight Equipment   | А  |                       | -         | -             | -                       | -         | -             | 4.900                   | -         | -             | 2.304                   | -         | -             | 0.731                   | -         | -             | -                       | -         | -             | 0.            |
| Secondary Distribution   |    |                       |           |               | <u> </u>                | 1         |               |                         |           | ļ             |                         |           |               |                         | ı         |               |                         |           | ļ             |               |
| AF   |    |                       |           | -             | -                       |           | -             | 4.900                   |           | -             | 2.304                   |           | -             | 0.731                   |           | -             | -                       |           | -             | 0.            |
| Aircrew Laser Eye<br>Protection (ALEP)<br>Block 2: Day Variant   | А  |                       | -         | -             | -                       | 0.002     | 1,695         | 3.800                   | 0.002     | 1,929         | 3.840                   | 0.002     | 1,809         | 3.750                   | -         | -             | -                       | 0.002     | 1,809         | 3             |
| Secondary Distribution   |    |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | _             | _                       |           | 1,695         | 3.800                   |           | 1,929         | 3.840                   |           | 1,809         | 3.750                   |           |               | _                       |           | 1,809         | 3             |
| Aircrew Laser Eye<br>Protection (ALEP)<br>Block 2: Night Variant | A  |                       | -         | -             | -                       | 0.003     | 815           | 2.521                   | 0.003     | 887           | 2.560                   | 0.003     | 1,302         | 3.879                   | -         | -             | -                       | 0.003     | 1,302         | 3             |
| Secondary Distribution   |    |                       |           |               |                         |           |               |                         |           |               |                         |           | · ·           |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | -             | -                       |           | 815           | 2.521                   |           | 887           | 2.560                   |           | 1,302         | 3.879                   |           | -             | -                       |           | 1,302         | 3             |
| Personnel Locator<br>Beacon                                      | Α  |                       | -         | -             | -                       | 0.003     | 14,616        | 44.984                  | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |               |
| Secondary Distribution   |    |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | -             | -                       |           | 14,616        | 44.984                  |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |               |
| Integrated Aircrew<br>Ensemble                                   | А  |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 8.252                   | -         | -             | -                       | -         | -             | 8             |
| Secondary Distribution   |    |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| AF   |    |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 8.252                   |           | -             | -                       |           | -             | 8             |
| Ejection Seat Safety/<br>Sustainability<br>Improvement Program   | А  |                       | -         | -             | -                       | -         | -             | -                       | 0.245     | 42            | 10.300                  | -         | -             | -                       | -         | -             | -                       | -         | -             |               |
| for Qualification of B-2<br>Seat Mod                             |    |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| Secondary Distribution   |    |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |               |
| AF   | Ш  |                       |           | -             | -                       |           | -             | -                       |           | 42            | 10.300                  |           | -             | -                       |           | -             | -                       |           | -             |               |
| Next Generation<br>Ejection Seat                                 | A  |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.000                   | -         | -             | 0.992                   | -         | -             | -                       | -         | -             | C             |

LI 842990 - Items Less Than \$5 Million Air Force

**UNCLASSIFIED** Page 8 of 10

P-1 Line #51

Volume 1 - 394

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 2

P-1 Line Item Number / Title:

842990 / Items Less Than \$5 Million

Aggregated Items Title: Items Less Than \$5 Million

| 080F / 04 / 2                                   |          |                       |           |               |                         |           | 0                    | 429907                  | Items Le  | ss IIIai      | φο IVIIII               | 1011      |               |                         | ite       | ills Les      | 5 Illali v              | 55 Million |               |             |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------|
|   |          |                       | P         | rior Year     | s                       |           | FY 2016              |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | FY        | 2018 OC       | 0                       | FY         | 2018 Tot      | :al         |
| Item Number /<br>Title [DODIC]                  | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Tota<br>Cos |
| AF  |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | 0.000                   |           | -             | 0.992                   |           | -             | -                       |            | -             | 0           |
| Air Force Reserve<br>Equipment                  | А        |                       | -         | -             | -                       | -         | -                    | 3.407                   | -         | -             | 0.000                   | -         | -             | -                       | -         | -             | -                       | -          | -             |             |
| Secondary Distribution                          |          |                       |           |               |                         | •         |                      |                         |           | ·             |                         |           |               |                         |           | ,             |                         |            | ,             |             |
| AF  |          |                       |           | -             | -                       |           | -                    | 3.407                   |           | -             | 0.000                   |           | -             | -                       |           | -             | -                       |            | -             |             |
| Special Tactics/<br>Combat Control<br>Equipment | Α        |                       | -         | -             | -                       | -         | -                    | -                       | -         | -             | 4.285                   | -         | -             | 4.584                   | -         | -             | -                       | -          | -             |             |
| Secondary Distribution                          | ,        |                       |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | 4.285                   |           | -             | 4.584                   |           | -             | -                       |            | -             |             |
| Groundcrew Goggle<br>(AN/PVS-14)                | Α        |                       | -         | -             | -                       | -         | -                    | -                       | 0.003     | 163           | 0.489                   | -         | -             | -                       | -         | -             | -                       | -          | -             |             |
| Secondary Distribution                          | ,        |                       |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |           | -                    | -                       |           | 98            | 0.294                   |           | -             | -                       |           | -             | -                       |            | -             |             |
| AFNG  |          |                       |           | -             | -                       |           | -                    | -                       |           | 49            | 0.147                   |           | -             | -                       |           | -             | -                       |            | -             |             |
| AFR   |          |                       |           | -             | -                       |           | -                    | -                       |           | 16            | 0.048                   |           | -             | -                       |           | -             | -                       |            | -             |             |
| Groundcrew Goggle<br>(AN/PVS-15)                | Α        |                       | -         | -             | -                       | -         | -                    | -                       | -         | -             | -                       | 0.011     | 82            | 0.904                   | -         | -             | -                       | 0.011      | 82            |             |
| Secondary Distribution                          | ,        |                       |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |            | J.            |             |
| AF  |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | 55            | 0.606                   |           | -             | -                       |            | 55            |             |
| AFNG  |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | 21            | 0.232                   |           | -             | -                       |            | 21            |             |
| AFR   |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | 6             | 0.066                   |           | -             | -                       |            | 6             |             |
| Fusion Goggle<br>Enhanced                       | А        |                       | -         | -             | 0.000                   | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -          | -             |             |
| Aircrew Goggle (AN/<br>AVS-9 (F4949G-TG)        | А        |                       | -         | -             | -                       | -         | -                    | -                       | -         | -             | -                       | 0.010     | 50            | 0.483                   | -         | -             | -                       | 0.010      | 50            |             |
| Secondary Distribution                          | ,        |                       |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | 35            | 0.338                   |           | -             | -                       |            | 35            |             |
| AFNG  |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | 10            | 0.097                   |           | -             | -                       |            | 10            |             |
| AFR   |          |                       |           | -             | -                       |           | -                    | -                       |           | -             | -                       |           | 5             | 0.048                   |           | -             | -                       |            | 5             |             |
| Test Set, TCTO Kit<br>(ANV-126A-UGF             | А        |                       | -         | -             | -                       | -         | -                    | -                       | 0.016     | 55            | 0.880                   | -         | -             | -                       | -         | -             | -                       | -          | -             |             |
| Secondary Distribution                          | ,        |                       |           |               | •                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF  |          |                       |           | -             | -                       |           | -                    | -                       |           | 28            | 0.448                   |           | -             | -                       |           | -             | -                       |            | -             |             |
| AFNG  |          |                       |           | -             | -                       |           | -                    | -                       |           | 22            | 0.352                   |           | -             | -                       |           | -             | -                       |            | -             | <u> </u>    |
| AFR   |          |                       |           | -             | -                       |           | -                    | -                       |           | 5             | 0.080                   |           | -             | -                       |           | -             | -                       |            | -             |             |
| Groundcrew Goggle<br>(AN/PVS 31A)               | А        |                       | -         | -             | -                       | -         | -                    | -                       | -         | -             | 16.600                  | -         | -             | -                       | 0.010     | 870           | 8.469                   | 0.010      | 870           |             |
| Secondary Distribution                          |          |                       |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF  |          |                       |           | _             | _                       |           | _                    | _                       |           | -             | 16.600                  |           | -             | _                       |           | 870           | 8.469                   |            | 870           |             |

LI 842990 - Items Less Than \$5 Million Air Force

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P-1 Line #51

Volume 1 - 395

**Date:** May 2017 Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Items Title: 3080F / 04 / 2 Items Less Than \$5 Million 842990 / Items Less Than \$5 Million

|                                    |          |        |             |               |                         |                |               |                         |           |               | . + •                   | . •       |               |                         |           |               | •                       | <b>~~</b> |               |                         |
|------------------------------------|----------|--------|-------------|---------------|-------------------------|----------------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                    |          |        | Р           | rior Year     | 'S                      |                | FY 2016       | 3                       |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | F         | / 2018 OC     | 0                       | F         | Y 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]     | ID<br>CD | l .    | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost      | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| PMA (NVG) Other<br>Government Cost | Α        |        | -           | -             | -                       | -              | -             | -                       | -         | -             | 0.011                   | -         | -             | 0.024                   | -         | -             | -                       | -         | -             | 0.024                   |
| Secondary Distribution             | ,        |        |             |               |                         |                |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                                 |          |        |             | -             | -                       |                | -             | -                       |           | -             | 0.011                   |           | -             | 0.024                   |           | -             | -                       |           | -             | 0.02                    |
| Subtotal: Safety, Rescue           | Equi     | pment  | -           | -             | -                       | -              | -             | 61.106                  | -         | -             | 42.699                  | -         | -             | 27.329                  | -         | -             | 8.469                   | -         | -             | 35.79                   |
| Total                              |          |        | -           | -             | -                       | -              | -             | 61.106                  | -         | -             | 42.699                  | -         | -             | 27.329                  | -         | -             | 8.469                   | -         | -             | 35.798                  |
| Note: Cubtotale or Tot             | ala ir   | thin E | hibit D 40a |               |                         | una assanths a | 40            | adin a                  |           |               |                         |           |               |                         |           |               |                         |           |               |                         |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

FY18 Costs increased by \$0.181M due to inflation adjustment - \$0.090M to Life Support Equipment, \$0.091M to Aircrew Flight Equipment.

FY18 Costs increased by \$0.043M due to inflation adjustment - Special Tactics/Combat Control Equipment

FY18 Costs increased by \$0.0131M due to inflation adjustment - NVGs

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

843050 / Mechanized Material Handling Equip

Support Equip / BSA 3: Depot Plant+Mtrls Handling Eq

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017            | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total   |
|--|----------------|------------------|--------------------|------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|---------|
| 11000aroo Garininary                           |                | 20.0             |                    | Duoo             | 000              | .ota.            | 20.0            | 0_0            |         |         | Compicto       | - Otal  |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 7.249            | 14.688             | 10.381           | 0.000            | 10.381           | 53.175          | 11.991         | 12.217  | 8.762   | -              | 118.463 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Net Procurement (P-1) (\$ in Millions)         | -              | 7.249            | 14.688             | 10.381           | 0.000            | 10.381           | 53.175          | 11.991         | 12.217  | 8.762   | -              | 118.463 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Total Obligation Authority (\$ in Millions)    | -              | 7.249            | 14.688             | 10.381           | 0.000            | 10.381           | 53.175          | 11.991         | 12.217  | 8.762   | -              | 118.463 |
| (The following                                 | Resource Sum   | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |         |         |                |         |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -              | -       |

### **Description:**

The Mechanized Materials Handling Equipment line provides funding for Mechanized Materials Handling Systems (MMHS) and Storage Aids Systems (SAS).

MMHS and SAS equipment provide bases worldwide with automated and static equipment to store, receive, and ship materiel. MMHS and SAS equipment involves the design and acquisition of mechanized and non-mechanized materials handling systems such as receiving, storage, and distribution systems; high density storage systems; and a variety of SAS equipment including racks, bin shelving, modular cabinets, and mezzanines.

Transportation systems generally include equipment such as heavy duty freight handling 463L conveyors, pallet buildup/breakdown lift conveyor stations, cargo staging racks, and overhead bridge cranes for air freight terminal systems; roller conveyors and overhead cranes for aerial delivery facility systems; inbound and outbound baggage conveyors and passenger boarding bridges for air passenger terminals.

Other types of MMHS include narrow aisle vehicle replacements and external aircraft fuel tank storage systems.

Adequately equipped facilities are essential to the storage and handling of weapon system components, and the processing of personnel, freight, and baggage to reduce pipeline time and to provide enhanced Air Force capability to respond to crises and threats whenever they occur in the world.

Program elements associated with this P-1 Line are 0202834F, 0702834F, 0802834F, 0402834F, 0502834F, 0502844F, 0207597F, and 0401319F.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

|   | Secondary | Distribution               | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|---|-----------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| A | \F        | Quantity                   | 18      | 30      | 15              | 0              | 15               | 22      | 25      | 22      | 25      |
|   |           | Total Obligation Authority | 6.624   | 12.343  | 7.606           | 0.000          | 7.606            | 51.775  | 11.991  | 12.217  | 8.762   |

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

843050 / Mechanized Material Handling Equip

Support Equip / BSA 3: Depot Plant+Mtrls Handling Eq

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Secondary              | / Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AFNG                   | Quantity                   | 2       | 4       | 10              | 0              | 10               | 7       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.625   | 1.975   | 2.775           | 0.000          | 2.775            | 1.400   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 0       | 1       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.370   | 0.000           | 0.000          | 0.000            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 20      | 35      | 25              | 0              | 25               | 29      | 25      | 22      | 25      |
| Secondary Distribution | Total Obligation Authority | 7.249   | 14.688  | 10.381          | 0.000          | 10.381           | 53.175  | 11.991  | 12.217  | 8.762   |

#### Justification:

FY18 procurement funds for MMHS/SAS equipment increases the productivity of Air Force operations, enhances management control of assets, reduces multiple handling of logistics materiel by consolidating assets, increases flexibility at a minimum investment cost, enhances safety, reduces losses due to damage of materiel in transport, and reduces congestion and delays in the receiving, storage and issue operations in supply, base level aircraft maintenance, and transportation facilities. Also provides critical support for mission readiness supporting the F-35 beddown as well as F-16 realignment resulting from the F-35 beddown.

FY18 MMHE is to be purchased in the following quantities: 1 crane systems, 3 conveyor systems, 6 high density storage systems, 2 receiving, storage and distribution systems, and 13 storage aid systems.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

845010 / Base Procured Equipment

Support Equip / BSA 5: Base Support Equipment

Line Item MDAP/MAIS Code: N/A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

| Line item wdariwais code. N/A                  |                |                  |                   |                  |                  |                  |                 |                |          |          |                |        |
|--|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|----------------|----------|----------|----------------|--------|
| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021  | FY 2022  | To<br>Complete | Total  |
| Resource Summary                               | 1 cars         | 1 1 2010         | 1 1 2017          | Dase             | 000              | iotai            | 1 1 2013        | 1 1 2020       | 1 1 2021 | 1 1 2022 | Complete       | TOtal  |
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 13.595           | 6.852             | 15.038           | 7.500            | 22.538           | 13.460          | 13.725         | 13.987   | 10.701   | -              | 94.858 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Net Procurement (P-1) (\$ in Millions)         | -              | 13.595           | 6.852             | 15.038           | 7.500            | 22.538           | 13.460          | 13.725         | 13.987   | 10.701   | -              | 94.858 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Total Obligation Authority (\$ in Millions)    | -              | 13.595           | 6.852             | 15.038           | 7.500            | 22.538           | 13.460          | 13.725         | 13.987   | 10.701   | -              | 94.858 |
| (The following                                 | Resource Sum   | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |          |          |                |        |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -                | -                | -               | -              | -        | -        | -              | -      |

## **Description:**

Base Procured Equipment:

Organizations throughout the Air Force acquire authorized investment equipment from the General Services Administration, Defense Logistics Agency, and commercial sources when these items exceed \$250,000 in cost or are unavailable through Air Force central procurement. Examples of equipment in this P-1 line typically include equipment and/or specialized tools for road and ground maintenance; vehicle maintenance; vehicle corrosion control; civil engineering maintenance; electrical and carpentry shops; specialized laboratories; kitchen and dining facilities; printing plants; microfilm, graphics support facilities; training ranges; uninterruptible power supply systems, physiological trainers to include, but are not limited to Barney Chairs, Altitude Chambers, Spatial Disorientation Trainers, Hypoxia Familiarization Trainers and Part Task Trainers, Reduced Oxygen Breathing Devices, Terrain Boards, Parachuting Trainers, Aircrew Exercise Equipment.

PEs associated with this P-1 Line are: 0202834F, 0205219F, 0208534F, 0305534F, 0402834F, 0502834F, 0502834F, 0702834F, 0804721F, 0804731F, 0804743F, 0804743F, 0804752F, 0808534F, 0901212F

| Seconda                | ary Distribution                  | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|-----------------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                          | 0       | 0       | 0               | 1              | 1                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority        | 13.595  | 6.852   | 14.087          | 7.500          | 21.587           | 4.240   | 4.321   | 4.400   | 0.000   |
| AFNG                   | Quantity                          | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority        | 0.000   | 0.000   | 0.847           | 0.000          | 0.847            | 0.860   | 0.875   | 0.890   | 0.907   |
| AFR                    | Quantity                          | 0       | 0       | 0               | 0              | 0                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority        | 0.000   | 0.000   | 0.104           | 0.000          | 0.104            | 0.105   | 0.108   | 0.111   | 0.114   |
| Total:                 | Quantity                          | 0       | 0       | 0               | 1              | 1                | 0       | 0       | 0       | 0       |
| Secondary Distribution | <b>Total Obligation Authority</b> | 13.595  | 6.852   | 15.038          | 7.500          | 22.538           | 5.205   | 5.304   | 5.401   | 1.021   |

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

845010 / Base Procured Equipment

P-1 Line Item Number / Title:

Support Equip / BSA 5: Base Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Base Procured Equipment        |             |          |                       | - / -                                    | - / 13.595                               | - / 6.852                                | - / 15.038                               | - /7.500                                 | - / 22.538                               |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 13.595                               | - / 6.852                                | - / 15.038                               | - / 7.500                                | - / 22.538                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

Base Procured Equipment:

Power Conditioning & Continuation Interfacing Equipment (PCCIE):

The PCCIE Program Office procures, replaces and modernizes uninterruptible power supply (UPS) systems to meet Air Force requirements. Many of these systems have exceeded the life expectancy of 12-15 years. PCCIE program is structured into small projects (from 3 - 125 kilovolt amps (kva)) and large projects (greater than 125 kva) and includes associated ancillary equipment.

PE 84731F - funds procure:

- a). Keesler Trainer/Simulator for Expeditionary Combat Support Radio Course: TS-4528A/U Multi-Channel DOCCT/S System (2x 3U), Two Channel, Lab/Class Local RF; Includes redundant power supply, training & IW Phase II channel control capability. This item simulates a UHF satellite terminal control station as well as the satellite system itself. It enables two-satellite ground terminals to establish a connection and pass data and voice communications to each other. It is used to certify objective
- completion in the Expeditionary Combat Support Radio course.
- b). Goodfellow AFB Fire Training Burn Trainers: New Fire Cause and Fire Inspection Trainers, Structural Burn Training Fire Box and SBCA Compressor and Air Pack Fill Station Replacement.
- c). Parachute System for Pararescue and Combat Rescue Officer training (Lackland AFB): Purchase of RamAir (RA-1) Parachute System

PE 84752F - funds procure Laboratory equipment for AF Institute of Technology.

Power Conditioning & Continuation Interfacing Equipment (PCCIE):

The new systems collectively satisfy critical user requirements and will:

- 1. Reduce overall footprint and weight by 50-60%.
- 2. Reduce operating and sustainment costs by 30%-50%.
- 3. Reduce acquisition costs as it applies to installation since many newer systems consist of more internal pre-wiring.
- 4. Lower parts count dramatically improves reliability by reducing the potential points of failure within the system.
- 5. Produce greater energy savings and higher operating efficiency in all configurations, typically between 92% and 93.5%; with all types of loads,

The Uninterruptible Power Supply (UPS) systems protect sensitive electronic equipment/systems such as command and control centers, intelligence missions, radars, etc.

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LI 845010 - Base Procured Equipment Air Force

P-1 Line #53

Volume 1 - 400

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:
Base Procured Equipment

| 3080F / 04 / 5                 |          |                       |           |                      |                         |           | 8             | 45010 <i>l</i>          | Base Pr   | ocured l      | Equipme                 | ent       |               |                         | B         | ase Proc      | ured Ed                 | quipment  |               |                         |
|--------------------------------|----------|-----------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|                                |          |                       | P         | rior Year            | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Bas    | se                      | F         | / 2018 OC     | 0                       | FY        | 2018 Tot      | al                      |
| Item Number /<br>Title [DODIC] | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Uncategorized                  |          |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         | ļ.        |               |                         |           |               |                         |
| BASE PROCURED EQUIPMENT        | Α        |                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 7.500     | 1             | 7.500                   | 7.500     | 1             | 7.5                     |
| Secondary Distribution         |          |                       |           |                      | •                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                             |          |                       |           | -                    | -                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | 1             | 7.500                   |           | 1             | 7.5                     |
| AF CIVIL ENGR SPT<br>AGENCY    | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| AF SPACE CMD                   | Α        |                       | -         | -                    | -                       | -         | -             | 1.590                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution         |          |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                             |          |                       |           | -                    | -                       |           | -             | 1.590                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             |                         |
| AIR COMBAT CMD                 | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| AIR EDUCATION & TRAINING CMD   | Α        |                       | -         | -                    | -                       | -         | -             | 7.555                   | -         | -             | 2.788                   | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Secondary Distribution         |          |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                             |          |                       |           | -                    | -                       |           | -             | 7.555                   |           | -             | 2.788                   |           | -             | -                       |           | -             | -                       |           | -             |                         |
| PACIFIC AIR<br>FORCES          | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| US AIR FORCES<br>EUROPE        | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| US AIR FORCE<br>ACADEMY        | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| AIR FORCE<br>MATERIEL CMD      | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| PCCIE                          | Α        |                       | -         | -                    | -                       | -         | -             | 4.450                   | -         | -             | 3.998                   | -         | -             | 3.803                   | -         | -             | -                       | -         | -             | 3.8                     |
| Secondary Distribution         |          |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                             |          |                       |           | -                    | -                       |           | -             | 4.450                   |           | -             | 3.998                   |           | -             | 3.803                   |           | -             | -                       |           | -             | 3.8                     |
| 1) PCCIE PMA                   | Α        |                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | 0.066                   | -         | -             | 10.284                  | -         | -             | -                       | -         | -             | 10.2                    |
| Secondary Distribution         |          |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                             |          |                       |           | -                    | -                       |           | -             | -                       |           | -             | 0.066                   |           | -             | 10.284                  |           | -             | -                       |           | -             | 10.2                    |
| PCCIE ANG/RES                  | Α        |                       | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.951                   | -         | -             | -                       | -         | -             | 0.9                     |
| Secondary Distribution         |          |                       |           |                      |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AFNG                           |          |                       |           | -                    | -                       |           | -             | -                       |           | -             | -                       |           | -             | 0.847                   |           | -             | -                       |           | -             | 0.8                     |
| AFR                            |          |                       |           | -                    | -                       |           | -             | -                       |           | -             | -                       |           | -             | 0.104                   |           | -             | -                       |           | -             | 0.1                     |
| AIR FORCE GLOBAL<br>STRIKE CMD | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| AIR FORCE WIDE/<br>PCCIE       | Α        |                       | -         | -                    | 0.000                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             |                         |
| Subtotal: Uncategorized        |          |                       | -         | -                    | -                       | -         | -             | 13.595                  | -         | -             | 6.852                   | -         | -             | 15.038                  | -         | -             | 7.500                   | -         | -             | 22.5                    |
| Total                          |          |                       | -         | -                    | -                       | -         | -             | 13.595                  | -         | -             | 6.852                   | -         | -             | 15.038                  | -         | -             | 7.500                   | -         | -             | 22.53                   |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

| xhibit P-40a, Budget Item Justification For Aggregated                                   | Items: FY 2018 Air Force   | <b>Date:</b> May 2017   |
|--|--|-------------------------|
| ppropriation / Budget Activity / Budget Sub Activity:                                    | P-1 Line Item Number / Title:  | Aggregated Items Title: |
| 080F / 04 / 5  | 845010 / Base Procured Equipment   | Base Procured Equipment |
| marks:<br>PCCIE PMA - FY18 funding will support Program Office Management efforts includ | ing computer support, travel, A&AS and cost estimating/analysis services |                         |
|  |  |                         |
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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

845100 / ENGINEERING AND EOD EQUIPMENT

Support Equip / BSA 5: Base Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0205671F

Line Item MDAP/MAIS Code: N/A

|   | Duiou          |                  |                   | EV 2040          | EV 2040          | EV 2040          |                 |               |         |         | Т-             |         |
|---|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|---------------|---------|---------|----------------|---------|
| Resource Summary                              | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020       | FY 2021 | FY 2022 | To<br>Complete | Total   |
| Procurement Quantity (Units in Each)          | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -              | 56.806           | 274.900           | 26.287           | 80.427           | 106.714          | 37.968          | 40.561        | 40.748  | 41.485  | -              | 599.182 |
| Less PY Advance Procurement (\$ in Millions)  | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Net Procurement (P-1) (\$ in Millions)        | -              | 56.806           | 274.900           | 26.287           | 80.427           | 106.714          | 37.968          | 40.561        | 40.748  | 41.485  | -              | 599.182 |
| Plus CY Advance Procurement (\$ in Millions)  | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Total Obligation Authority (\$ in Millions)   | -              | 56.806           | 274.900           | 26.287           | 80.427           | 106.714          | 37.968          | 40.561        | 40.748  | 41.485  | -              | 599.182 |
| (The following                                | g Resource Sum | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request   | s are documente | d elsewhere.) |         |         |                |         |
| Initial Spares (\$ in Millions)               | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |

### **Description:**

FY18 OCO Funding \$40.427 JCREW (Joint Counter Radio-Controlled Improvised Explosive Devices Electronic Warfare): 02025671F Program Element Code associated with P-1 line. Funding supports partial JCREW system procurement to replace partially legacy CREW systems that cannot defeat advanced Radio-Controlled Improvised Explosive Device (RCIED) threats.

FY18 OCO funding \$40.0M Recovery of Airbases Denied by Ordnance (RADBO): 0208028F Program Element Code associated with P-1 line. The funding supports the procurement of specialized tools, equipment, and vehicles required to provide combatant commanders the capability to rapidly assess and report damage, assess and remove/neutralize unexploded ordnance (UXO) on damaged airfields and repair damage to support sortie generation.

FY18 Baseline Funding \$8.048M EOD (Explosive Ordnance Disposal Forces): 0204424F Program Elements Codes (PECs) associated with P-1 Line. The funding supports Explosive Ordnance Disposal (EOD) teams equipment requirements in countering explosive threats in garrison and deployed locations.

FY18 Baseline Funding \$1.395M for Airfield Damage Repair (ADR) program: PEC 0208028F Airfield Damage Repair (ADR)associated with P-1 Line. The funding supports the major components of ADR and ensure the Air Force has the capability to repair airfields in minimal timing to support sortie generations. The major repair components of Air Field Damage Repair training/Small Size, Medium Sized (R-1), and Very Large Size (R-3) Kits. Current efforts under ADR are intended to bring the repair time in to operational acceptable limits in support of COCOM post attack Air Tasking Orders.

FY18 Baseline Funding of \$4.200M for outdated Reverse Osmosis Water Purification Unit (ROWPU) systems: PEC 0207430F associated with P-1 Line. The funding procures full EALs kit for 819, and provides lifecycle replacement on 3 LAMS-V shelters. Current 600 GPM ROWPU units are outdated and no longer supported by the manufacturer and no longer fielded by AF, Army, Navy, and Marines. Replacement parts are now custom manufacture increasing lead time and cost.

FY18 Baseline Funding of \$12.396M for Expedient Small Asset Protection (ESAP) shelters: PEC 0208028F associated with P-1 Line. Funding provided by an OSD Resource Management Decision (RMD) to procure ESAP Shelters and ESAP shelter support.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

845100 / ENGINEERING AND FOD EQUIPMENT

Support Equip / BSA 5: Base Support Equipment

ID Code (A=Service Ready. B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0205671F

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | ENGINEERING AND EOD EQUIPMENT  |             |          |                       | - / -                                    | - / 56.806                               | - / 274.900                              | - / 26.287                               | - / 80.427                               | - / 106.714                              |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 56.806                               | - / 274.900                              | - / 26.287                               | - / 80.427                               | - /106.714                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 OCO Funding \$40.427M in PEC 0205671F will procure JCREW (Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare) systems in the following quantities: \$37.300M procures 128 JCREW vehicle mounted systems of partially replace legacy CREW systems: \$3.127M procures 313 vehicle integration kits for JCREW.

FY18 OCO funding \$40.0M in PEC 0208028F will procure 14 RADBO systems at bases in Gulf Coast Countries in the Southwest Asia (SWA) AOR, RADBO systems integrates directed energy and robotic arm for UXO protection during rapid airfield damage recovery/repair.

FY18 Baseline funding of \$8.042M in PEC 020442F will procure Explosive Ordnance Devices (EOD) support in the following quantities: \$1.226M procures Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (CREW) Universal Test Sets (UTS) to ensure operability of critical CREW systems to support Counter IED operations; \$1.500M continues to procure Total Containment Vessel (TCV) which is a Self-contained bomb containment system capable of repeatedly containing the overpressure and fragmentation (within the vessel) associated with the detonation of high explosives (HE) and or improvised explosive devices (IED) that has been certified by the Department of Defense explosives Safety Board (DDESB) and supports installation emergency response to all types of explosive incidents; \$0.352K procures (light tactical trailers) to support rapid mobility and a drive-on/drive off deployed capability; \$4.970M in PEC 020442F procures Remote Firing Device: High performance remote initiation system designed to command detonate explosives and associated EOD equipment using UHF radio signals and time delay. The two principle items of the system are the Transmitter and Receiver.

FY18 Baseline ADR funding of \$1.395M in PEC 0208028F Air Field Damage repair kits. The support equipment items include ADR Tool Trailers (hand tools and small equipment items required for crater repair), Small Repair Kits (hand tools and saws for expeditious and semi-permanent repairs), Inclement Weather Kits (tools and materials to place rapid setting materials in cold, hot, and wet weather), water skids (provides supplemental weather for rapid setting materials), and light carts (support night operations). The Basic/Small kit is used to provide basic repair equipment/materials in order to repair approximately 18 small (10 ft diameter) craters or three, 25 diameter craters in 6.5 hours. Additional airfield damage can be repaired based on the availability of time and materials. Basic/Small kits will also be used at training locations.

FY18 Baseline funding in PEC 0207430F: \$2.9M provides for outdated ROWPU systems, \$0.556K procures full EALs kit for 819, and \$0.744M provides lifecycle replacement on 3 LAMS-V shelters. Current 600 GPM ROWPU units are outdated and no longer supported by the manufacturer and no longer fielded by AF, Army, Navy, and Marines. Replacement parts are now custom manufacture increasing lead time and cost.

FY18 Baseline funding of \$12.396M in PEC 0208028F will procure Expeditionary Small Asset Protection (ESAP) shelters in the following quantities: 8 ESAP Type I Fighter Aircraft Shelters for \$7.2M; 6 ESAP Type II Equipment shelters for \$2.490M and \$2.706M for Shelters support. ESAP shelters are critical for protection of airfield assets (fighter aircraft and ground support equipment) that are in immediate danger of an attack. These ESAPs will be strategically postured within the PACAF theater.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

**Date:** May 2017

Aggregated Items Title:

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F / 04 / 5

845100 / ENGINEERING AND EOD EQUIPMENT

ENGINEERING AND EOD EQUIPMENT

|  |          |                       | P         | rior Years    | <br>S                   |            | FY 2016       |                         |            | FY 2017       |                         | FΥ         | 2018 Bas      | se                      | FY         | 2018 OC       | 0             | FY         | 2018 Tot      | tal           |
|--|----------|-----------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|-------------------------|------------|---------------|---------------|------------|---------------|---------------|
| Item Number /<br>Title [DODIC]                             | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost | Unit Cost  | Qty<br>(Each) | Total<br>Cost |
| Incategorized  |          |                       |           |               |                         |            |               |                         |            |               |                         |            |               |                         |            |               |               |            |               |               |
| CVRJ CREW<br>Refurbishment                                 | Α        |                       | -         | -             | -                       | -          | -             | -                       | -          | -             | 221.000                 | -          | -             | -                       | -          | -             | -             | -          | -             | -             |
| JCREW Dismounted<br>Systems                                | Α        |                       | -         | -             | -                       | 98,458.00  | 110           | 10.830                  | 74,979.59  | 49            | 3.674                   | -          | -             | -                       | -          | -             | -             | -          | -             | -             |
| JCREW Mounted<br>Systems                                   | Α        |                       | -         | -             | -                       | 140,548.10 | 200           | 28.110                  | 221,220.18 | 218           | 48.226                  | -          | -             | -                       | 291,406.25 | 128           | 37.300        | 291,406.25 | 128           | 37.30         |
| JCREW Fixed Site<br>Systems                                | Α        |                       | -         | -             | 0.000                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             | -             |
| JCREW Vehicle<br>Integration Kits                          | Α        |                       | -         | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | 9,990.42   | 313           | 3.127         | 9,990.42   | 313           | 3.1           |
| CREW Universal Test<br>Sets                                | Α        |                       | -         | -             | -                       | -          | -             | -                       | -          | -             | -                       | 47,153.85  | 26            | 1.226                   | -          | -             | -             | 47,153.85  | 26            | 1.2           |
| FRS (EOD portable X-RAY)                                   | Α        |                       | -         | -             | 0.000                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| Total Containment<br>Vessel                                | Α        |                       | -         | -             | -                       | -          | -             | -                       | -          | -             | -                       | 300,000.00 | 5             | 1.500                   | -          | -             | -             | 300,000.00 | 5             | 1.5           |
| Base Support<br>Emergency Response<br>Transport            | Α        |                       | -         | -             | 0.000                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| Fuze Disassembly<br>System, Explosive<br>Ordnance Disposal | Α        |                       | -         | -             | 0.000                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| Light Tactial Trailers                                     | Α        |                       | -         | -             | -                       | 17,000.00  | 30            | 0.510                   | -          | -             | -                       | 35,200.00  | 10            | 0.352                   | -          | -             | -             | 35,200.00  | 10            | 0.3           |
| EOD-M Program -<br>Ordance Locator                         | Α        |                       | -         | -             | -                       | 26,921.00  | 14            | 0.377                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| EOD-M IED Search<br>Kits                                   | Α        |                       | -         | -             | -                       | 6,000.00   | 100           | 0.600                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| EOD-M Diarming<br>Toolsets                                 | Α        |                       | -         | -             | -                       | 10,000.00  | 24            | 0.240                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| EOD-M PowerHawk<br>Robot Attachment                        | Α        |                       | -         | -             | -                       | 39,670.00  | 30            | 1.190                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| EOD-M Mini Remote<br>Firing Device                         | Α        |                       | -         | -             | -                       | -          | -             | 0.000                   | -          | -             | -                       | 35,000.00  | 142           | 4.970                   | -          | -             | -             | 35,000.00  | 142           | 4.9           |
| RECOVERY REPAIR<br>KIT (Training/Small<br>Sized)           | Α        |                       | -         | -             | -                       | 435,000.00 | 3             | 1.305                   | 400,000.00 | 5             | 2.000                   | 465,000.00 | 3             | 1.395                   | -          | -             | -             | 465,000.00 | 3             | 1.3           |
| RECOVERY REPAIR<br>KIT - R1 (Medium<br>Sized Kit)          | Α        |                       | -         | -             | -                       | 1,262K     | 1             | 1.262                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |
| RECOVERY REPAIR<br>KIT - R2 (Large Size<br>Kit)            | Α        |                       | -         | -             | 0.000                   | -          | -             | -                       | -          | -             | -                       | -          | -             | -                       | -          | -             | -             | -          | -             |               |

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air ForceDate: May 2017Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3080F / 04 / 5845100 / ENGINEERING AND EOD EQUIPMENTENGINEERING AND EOD EQUIPMENT

|   |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY         | / 2018 Bas    | se                      | F         | 2018 OC       | :0                      | F          | / 2018 Tot    | tal                     |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------------------|
| Item Number /<br>Title [DODIC]                                    | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| RECOVERY REPAIR<br>KIT - R3 (Very Large<br>Size Kit)              | A        |                       | -         | -             | -                       | 2,845K    | 1             | 2.845                   | -         | -             | -                       | -          | -             | -                       | -         | -             | -                       | -          | -             | -                       |
| RADBO Equipment,<br>Integration, & Spares<br>Kits                 | A        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -          | -             | -                       | 2,857K    | 14            | 40.000                  | 2,857K     | 14            | 40.000                  |
| Support Agadez<br>Infrastructure -<br>IT Service Mgmt<br>Services | A        |                       | -         | -             | -                       | 9,537K    | 1             | 9.537                   | -         | -             | -                       | 248,000.00 | 1             | 0.248                   | -         | -             | -                       | 248,000.00 | 1             | 0.248                   |
| ROWPU, 1500gph  | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 290,000.00 | 10            | 2.900                   | -         | -             | -                       | 290,000.00 | 10            | 2.900                   |
| LAMS-V  | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 248,000.00 | 3             | 0.744                   | -         | -             | -                       | 248,000.00 | 3             | 0.744                   |
| EALS Kit  | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 556,000.00 | 1             | 0.556                   | -         | -             | -                       | 556,000.00 | 1             | 0.556                   |
| ESAP Type I Shelters  | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 900,000.00 | 8             | 7.200                   | -         | -             | -                       | 900,000.00 | 8             | 7.200                   |
| ESAP Type II Shelters   | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 415,000.00 | 6             | 2.490                   | -         | -             | -                       | 415,000.00 | 6             | 2.490                   |
| ESAP Shelter Support  | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 2,706K     | 1             | 2.706                   | -         | -             | -                       | 2,706K     | 1             | 2.706                   |
| Subtotal: Uncategorized   |          |                       | -         | -             | -                       | -         | -             | 56.806                  | -         | -             | 274.900                 | -          | -             | 26.287                  | -         | -             | 80.427                  | -          | -             | 106.714                 |
| Total   |          |                       | -         | -             | -                       | -         | -             | 56.806                  | -         | -             | 274.900                 | -          | -             | 26.287                  | -         | -             | 80.427                  | -          | -             | 106.714                 |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

Support Equip / BSA 5: Base Support Equipment

P-1 Line Item Number / Title: 845420 / Mobility Equipment

ID Code (A=Service Ready), B=Not Service Ready): A Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

| Line item widap/wais code: N/A                |              |                  |                    |                  |                 |                 |                 |                |         |         |          |         |
|---|--------------|------------------|--------------------|------------------|-----------------|-----------------|-----------------|----------------|---------|---------|----------|---------|
|   | Prior        |                  |                    | FY 2018          | FY 2018         | FY 2018         |                 |                |         |         | То       |         |
| Resource Summary                              | Years        | FY 2016          | FY 2017            | Base             | oco             | Total           | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)          | -            | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 66.986           | 43.128             | 8.470            | 0.000           | 8.470           | 9.617           | 9.789          | 9.965   | 10.145  | -        | 158.100 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)        | -            | 66.986           | 43.128             | 8.470            | 0.000           | 8.470           | 9.617           | 9.789          | 9.965   | 10.145  | -        | 158.100 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)   | -            | 66.986           | 43.128             | 8.470            | 0.000           | 8.470           | 9.617           | 9.789          | 9.965   | 10.145  | -        | 158.100 |
| (The following                                | Resource Sum | mary rows are fo | or informational p | urposes only. Th | e corresponding | budget requests | s are documente | ed elsewhere.) |         |         | ĺ        |         |
| Initial Spares (\$ in Millions)               | -            | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                  | -                | -               | -               | -               | -              | -       | -       | -        | -       |

### **Description:**

This program funds procurement of Basic Expeditionary Airfield Resources (BEAR). It includes equipment to support the bed down of deployed forces (personnel, aircraft and support equipment) at austere and semi-austere locations. BEAR assets are a critical Agile Combat Support enabler for the Expeditionary Air Force. BEAR is composed of five types of air base capability packages: housekeeping, feeding, hygiene, power generation and flight line. Flight line packages consist of airfield lighting, aircraft hangars, fire stations, and numerous additional systems to support airfield operations. The program provides funding to procure new and replacement equipment items, and multi-media packages required to support BEAR training facilities at Silver Flag Sites, Regional Training Sites, Technical Schools, Technical Certification Centers, Services Combat Center Training, 635MMG, and Eagle Flag. Costs include inventory reconstitution, spares and consumables, repairs, and procurement of new equipment for upgrades or full UTC's replacement. BEAR demonstrated its critical role in support of Operations Enduring Freedom and other operations worldwide.

The AF continues to modernize major BEAR components to replace obsolete and inefficient items (e.g., Power Generation, Hygiene, Refrigeration, EALS, MAAS, Shelters, and Feeding):

Force Module Water System: Water System takes non-potable water and converts it into potable water. The system is modular and scalable in design and consists of Source Run, Water Production, Reverse Osmosis Water Purification Unit (ROWPU), Initial, Follow-on, and Industrial Operations, Flight line Extension, freeze protection, grey water recovery, pumping, piping, and storage equipment; applicable fittings; and other components such as fluid control valves.

Power System: Consists of prime and secondary power equipment which provides the capability to generate and distribute power to billeting, feeding, flight line and industrial operations at forward deployed sites. The primary power source for BEAR bed down locations is the BEAR Power Unit (BPU). The BPU is an 800 kilowatt (kW) Tier II compliant diesel generator. The power from the BPU is distributed through buried high voltage cabling and stepped down to facility power through the Secondary Distribution Center (SDC). The SDC is a 150 kilovolt-ampere (KVA) transformer capable of supporting twelve (12) billeting shelters via the Primary Distribution Panels (PDP).

Expeditionary Airfield Lighting System (EALS)(Legacy): Light Emitting Diode (LED) and incandescent runway lighting system designed to be rapidly installed at contingency airfields and at other locations that need temporary airfield lighting. The lighting kit for runways includes runway edge and threshold lights, precision approach path indicator (PAPI), and strobe approach lights, distance to go marker lamps, taxi way lamps and battery-operated obstruction lights. The EALS also includes the generators, cables, control cables, transformers and regulators. The entire system is packaged on six (6) mobile trailers. System will be replaced with a Next Generation System over the FYDP.

Mobile Aircraft Arresting System: This air transportable barrier arresting Bak-12 mounted on a mobile trailer to accommodate the recovery of fighter aircraft returning to battle damaged airfield.

LI 845420 - Mobility Equipment Air Force

P-1 Line #55

Volume 1 - 407

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

Support Equip / BSA 5: Base Support Equipment

P-1 Line Item Number / Title: 845420 / Mobility Equipment

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Hygiene: Hygiene includes Shower, Shave and Latrine, WH-400 water heaters for initial Hygiene fielding and Self Help Laundry system which provides personal hygiene facilities in support of BEAR bases.

Hygiene Shelters: Hygiene Shelters are designed to be used as changing rooms connecting to the BEAR Hygiene System. The shelters support personnel utilizing BEAR Hygiene Systems.

Refrigeration: Refrigeration units designed for the carriage of deep frozen, frozen, chilled and general cargo by road, rail, air, and sea (above or below deck), suitable for austere environmental conditions. It is used to support the BEAR services, feeding and mortuary operations.

Shelters: Shelters vary in sizes and are needed for billeting, kitchen, hygiene, and aircraft and equipment maintenance. Includes lighting, electrical equipment, environmental control units, remote area lighting, Shelter Flies, Shelter Flooring/matting for various shelter sizes. Shelter liners.

Shelter Flooring: Shelter flooring varies in size for small and large shelters (ACH, LAMS, Mortuary).

Feeding: BEAR Feeding includes kitchen and all applicable equipment. BEAR Feeding system provides the capability to prepare, and then serve, 500 meals over a two hour serving period, twice per day (24 hour period). The Feeding system is worldwide deployable and supports numerous basing options. This system supports initial mission requirements and follow-on high mobility feeding requirements for rapidly deployable mobility packages and other contingencies in all theaters of operation.

10K Fuel Bladder: Collapsible, coated fabric fuel bladders are often used as an auxiliary fuel source for MEP generators. This is especially true for high fuel-consumption prime power generators.

Heating, Ventilating, and Air Conditioning (HVAC): provide thermal comfort and acceptable indoor air quality.

Environmental Control Unit (ECU): Heat Pump to provide cooling, heating via reversing valve (heat pump) and supplemental heat via resistance heat strips.

Training/Multi-Media Training - Provides BEAR and items for all training sites and funds for all required BEAR multi-media training requirements.

"Fiscal Year (FY) 2017 Request for Additional Appropriations": \$34.982 million is required to address emergency warfighting readiness requirements. Power generation is a must to sustain operations at austere locations. BEAR Power Unit is a modernization effort to replace legacy power units that have out lived life expectancy and no longer have repair capability. Purchasing BEAR PU requirements early allows assembly line to continue without interruption for a smooth requirement fulfillment.

Program element associated with this P-1 Line is: 041135F.

#### Justification:

FY18 procurement dollars in the amount of \$8.470M procures 4 Legacy Airfield Lighting System (EALS), 32 Next Generation Small Shelter System, 1 Mobile Aircraft Arresting System and PMA in Support of Installation and unit mission requirements for Air Force personnel.

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Page 2 of 2 P-1 Line #55

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

845990 / Items Less Than \$5 Million

Support Equip / BSA 5: Base Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior          |                  |                   | FY 2018          | FY 2018         | FY 2018        |                 |               |         |         | То       |         |
|--|----------------|------------------|-------------------|------------------|-----------------|----------------|-----------------|---------------|---------|---------|----------|---------|
| Resource Summary                               | Years          | FY 2016          | FY 2017           | Base             | oco             | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 34.707           | 28.427            | 28.768           | 110.405         | 139.173        | 56.265          | 56.716        | 45.087  | 45.905  | -        | 406.280 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -              | 34.707           | 28.427            | 28.768           | 110.405         | 139.173        | 56.265          | 56.716        | 45.087  | 45.905  | -        | 406.280 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -              | 34.707           | 28.427            | 28.768           | 110.405         | 139.173        | 56.265          | 56.716        | 45.087  | 45.905  | -        | 406.280 |
| (The following                                 | g Resource Sum | mary rows are fo | r informational p | urposes only. Th | e corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -               | -              | -               | -             | -       | -       | -        | _       |

## **Description:**

This program provides a wide variety of base support items with worldwide application, to include but not limited to: aircraft arresting systems; IPE Equipment; Fuels Support Equipment; Generator Power plants, Deployable Debrief Facilities (DDF) and related cargo pallet systems. This equipment provides prime support for all base missions. Lack of funding for these equipment items limits maintenance capabilities, testing functions, anti-terrorism/security missions, communications capabilities, flight operations, and the ability of Air Force units to meet deployment requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Program elements associated with this P-1 Line are: 0202834F, 0207142F, 0208031F, 0208534F, 0401221F, 0402834F, 0502834F, 0502834F, 0702834F, 0802834F.

| Second                 | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 5       | 4       | 6               | 0              | 6                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 34.707  | 26.538  | 27.812          | 110.405        | 138.217          | 0.000   | 0.000   | 0.000   | 0.000   |
| AFNG                   | Quantity                   | 0       | 4       | 2               | 0              | 2                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 1.511   | 0.766           | 0.000          | 0.766            | 0.000   | 0.000   | 0.000   | 0.000   |
| AFR                    | Quantity                   | 0       | 1       | 1               | 0              | 1                | 0       | 0       | 0       | 0       |
|                        | Total Obligation Authority | 0.000   | 0.378   | 0.190           | 0.000          | 0.190            | 0.000   | 0.000   | 0.000   | 0.000   |
| Total:                 | Quantity                   | 5       | 9       | 9               | 0              | 9                | 0       | 0       | 0       | 0       |
| Secondary Distribution | Total Obligation Authority | 34.707  | 28.427  | 28.768          | 110.405        | 139.173          | 0.000   | 0.000   | 0.000   | 0.000   |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

\_

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

845990 / Items Less Than \$5 Million

Support Equip / BSA 5: Base Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Items Less Than \$5 Million    |             |          |                       | - / -                                    | - / 34.707                               | - / 28.427                               | - / 28.768                               | - / 110.405                              | - / 139.173                              |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 34.707                               | - / 28.427                               | - / 28.768                               | - / 110.405                              | - /139.173                               |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 procurement dollars in the amount of \$28.768M procures 1 Aircraft Arresting Barrier, 5 Industrial Plant Equipment, 1 Generator Plant, 1 Automated High Vacuum Gauge System, Fuels Support Equipment (FSE) and Fuels Operational Readiness Capability Equipment (FORCE), 1 Prefab Gym Facility and PMA in support of installation and unit mission requirements for Air Force personnel.

FY18 OCO dollars in the amount of \$110.405M will procure equipment in support of the European Contingency Air Operations Set (ECAOS) Deployable Air Base Systems (DABS) - Facilities, Equipment, and Vehicles (FEV).

UNCLASSIFIED
Page 2 of 4

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity: Aggregated Items Title: P-1 Line Item Number / Title:

| 3080F / 04 / 5                                   |          |                       |           |               |                         |           | 3             | 345990 <i>I</i>         | Items Le  | ess Than      | \$5 Mill                | ion       |               |                         | Ite       | ems Les       | s Than S                | 55 Millior | 1             |             |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|------------|---------------|-------------|
|  |          |                       | Pr        | ior Year      | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | 2018 Bas      | se                      | FY        | ′ 2018 OC     | :0                      | FY         | 2018 Tot      | al          |
| Item Number /<br>Title [DODIC]                   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost  | Qty<br>(Each) | Tota<br>Cos |
| Support Equipment and \                          | /ehicl   | les (SE               | V)        |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| FSE / FORCE (1)                                  | Α        |                       | -         | -             | -                       | -         | -             | 23.612                  | -         | -             | 23.886                  | -         | -             | 24.036                  | -         | -             | -                       | -          | -             | 24.         |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           | ,             |                         |           |               |                         |           |               |                         |            |               |             |
| AF   |          |                       |           | -             | -                       |           | -             | 23.612                  |           | -             | 23.886                  |           | -             | 24.036                  |           | -             | -                       |            | -             | 24          |
| PMA OTHER<br>GOVERNMENT<br>COSTS (FORCE)         | A        |                       | -         | -             | -                       | -         | -             | 0.015                   | -         | -             | 0.019                   | -         | -             | 0.020                   | -         | -             | -                       | -          | -             | 0.          |
| Secondary Distribution                           |          |                       |           |               |                         | •         |               |                         |           |               |                         |           |               |                         |           |               |                         |            | ·             |             |
| AF   |          |                       |           | -             | -                       |           | -             | 0.015                   |           | -             | 0.019                   |           | -             | 0.020                   |           | -             | -                       |            | -             | 0           |
| FSC 1710 AIRCRAFT<br>ARRESTING<br>SYSTEM         | A        |                       | -         | -             | -                       | -         | -             | -                       | 0.268     | 2             | 0.535                   | 0.301     | 1             | 0.301                   | -         | -             | -                       | 0.301      | 1             | 0           |
| Secondary Distribution                           |          |                       |           |               | ,                       |           |               |                         |           | *             |                         |           |               |                         |           |               |                         |            |               |             |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | 2             | 0.535                   |           | 1             | 0.301                   |           | -             | -                       |            | 1             | 0           |
| GENERATOR<br>POWER PLANT                         | А        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | 0.190     | 1             | 0.190                   | -         | -             | -                       | 0.190      | 1             | 0           |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AFR  |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | 1             | 0.190                   |           | -             | -                       |            | 1             | 0           |
| PMA - OTHER<br>GOVERNMENT<br>COSTS               | A        |                       | -         | -             | -                       | -         | -             | 0.061                   | -         | -             | 0.035                   | -         | -             | 0.010                   | -         | -             | 0.000                   | -          | -             | 0           |
| Secondary Distribution                           |          |                       |           |               |                         |           |               | 1                       |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF   |          |                       |           | -             | -                       |           | -             | 0.061                   |           | -             | 0.035                   |           | -             | 0.010                   |           | -             | 0.000                   |            | -             | 0           |
| PMA CONTRACTOR<br>SERVICES                       | А        |                       | -         | -             | -                       | -         | -             | 0.254                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -          | -             |             |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF   |          |                       |           | -             | -                       |           | -             | 0.254                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |            | -             |             |
| ECAOS/DABS-FEV (2)                               | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 110.405                 | -          | -             | 110         |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           | Į.            |                         |           |               |                         | l l       |               |                         |            |               |             |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | 110.405                 |            | -             | 110.        |
| ubtotal: Support Equipn<br>ehicles (SEV)         | nent a   | and                   | -         | -             | -                       | -         | -             | 23.942                  | -         | -             | 24.475                  | -         | -             | 24.557                  | -         | -             | 110.405                 | -          | -             | 134         |
| ir Force Sustainment Ce                          | enter    | (AFSC)                | (404)     |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| IPE EQUIPMENT                                    | Α        |                       | -         | -             | -                       | 0.447     | 5             | 2.235                   | 0.378     | 7             | 2.644                   | 0.383     | 5             | 1.915                   | -         | -             | -                       | 0.383      | 5             | 1           |
| Secondary Distribution                           |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |            |               |             |
| AF   |          |                       |           | -             | -                       |           | 5             | 2.235                   |           | 2             | 0.755                   |           | 3             | 1.149                   |           | -             | -                       |            | 3             | 1           |
| AFNG   |          |                       |           | -             | -                       |           | -             | -                       |           | 4             | 1.511                   |           | 2             | 0.766                   |           | -             | -                       |            | 2             | 0           |
| AFR  |          |                       |           | -             | -                       |           | -             | -                       |           | 1             | 0.378                   |           | -             | -                       |           | -             | -                       |            | -             |             |
| Subtotal: Air Force Susta<br>Center (AFSC) (404) | inme     | nt                    | -         | -             | -                       | -         | -             | 2.235                   | -         | -             | 2.644                   | -         | -             | 1.915                   | -         | -             | -                       | -          | -             | 1.          |

LI 845990 - Items Less Than \$5 Million Air Force

**UNCLASSIFIED** Page 3 of 4

P-1 Line #56

**Date**: May 2017

Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Aggregated Items Title:

845990 / Items Less Than \$5 Million

Items Less Than \$5 Million

| 3000F / 04 / 3   |          |                       |           |               |                         |           |               | 1 0000                  | items Le  | Jos IIIai            | ι ψο ινιιιι             | 1011      |               |                         | 110       | JIIIS ECS     | 3 IIIdii C              | DOILLINI CO | •             |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-------------|---------------|-------------------------|
|  |          |                       | Р         | rior Year     | 's                      |           | FY 2016       |                         |           | FY 2017              |                         | FY        | 2018 Bas      | se                      | FY        | / 2018 OC     | :0                      | FY          | 2018 Tot      | tal                     |
| Item Number /<br>Title [DODIC]                         | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost   | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| OTHER ORGANIZATIONS                                    | ;        |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |             |               |                         |
| AUTOMATED<br>HIGH VACUUM<br>GAUGE SYSTEM<br>(AFMETCAL) | A        |                       | -         | -             | -                       | -         | -             | -                       | -         |                      | -                       | 0.400     | 1             | 0.400                   | -         | -             | -                       | 0.400       | 1             | 0.400                   |
| Secondary Distribution                                 |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |             |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | -                    | -                       |           | 1             | 0.400                   |           | -             | -                       |             | 1             | 0.400                   |
| DEPLOYABLE<br>DEBRIEF FACILITIES<br>(DDF)              | Α        |                       | -         | -             | -                       | -         | -             | 0.980                   | -         | -                    | 1.308                   | -         | -             | 1.346                   | -         | -             | -                       | -           | -             | 1.346                   |
| Secondary Distribution                                 |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |             |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | 0.980                   |           | -                    | 1.308                   |           | -             | 1.346                   |           | -             | -                       |             | -             | 1.346                   |
| SHELTERS (3)   | Α        |                       | -         | -             | -                       | -         | -             | 7.550                   | -         | -                    | -                       | -         | -             | -                       | -         | -             | -                       | -           | -             | -                       |
| Secondary Distribution                                 |          |                       |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |           |               |                         |             |               | _                       |
| AF   |          |                       |           | -             | -                       |           | -             | 7.550                   |           | -                    | -                       |           | -             | -                       |           | -             | -                       |             | -             | -                       |
| EXERCISE PREFAB<br>GYM FACILITY <sup>(4)</sup>         | Α        |                       | -         | -             | -                       | -         | -             | -                       | -         | -                    | -                       | 0.550     | 1             | 0.550                   | -         | -             | -                       | 0.550       | 1             | 0.550                   |
| Secondary Distribution                                 |          |                       |           |               |                         | ,         |               |                         |           |                      |                         |           |               |                         |           |               |                         |             |               |                         |
| AF   |          |                       |           | -             | -                       |           | -             | -                       |           | -                    | -                       |           | 1             | 0.550                   |           | -             | -                       |             | 1             | 0.550                   |
| Subtotal: OTHER ORGAN                                  | IIZAT    | IONS                  | -         | -             | -                       | -         | -             | 8.530                   | -         | -                    | 1.308                   | -         | -             | 2.296                   | -         | -             | -                       | -           | -             | 2.296                   |
| Total  |          |                       | -         | -             | -                       | -         | -             | 34.707                  | -         | -                    | 28.427                  | -         | -             | 28.768                  | _         | -             | 110.405                 | -           | -             | 139.173                 |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

#### Remarks:

PROGRAM MANAGEMENT ADMINISTRATION (PMA): PMA supports the operation of the program office in its management and oversight role via travel, procurement of supplies and Advisory and Administrative Services (A&AS).

#### Footnotes:

- (1) FY16 funding includes \$9.100M requested for Overseas Contingency Operations to procure Fuels Support Equipment (FSE) and Fuels Operational Readiness Capability Equipment (FORCE).
- (2) FY18 funding includes \$110.405M requested for Overseas Contingency Operations to procure the European Contingency Air Operations Set (ECAOS) Deployable Air Base System (DABS) Facilities, Equipment, and Vehicles (FEV)
- $^{(3)}$  FY16 funding includes \$4.150M requested for Overseas Contingency Operations to procure shelters.
- (4) FY18 funding for COCOM requirement for USAFE (Incirlik AB)

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

846070 / DARP RC135

Support Equip / BSA 6: Special Support Projects

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305207F

Line Item MDAP/MAIS Code: N/A

| Resource Summary                               | Prior<br>Years | FY 2016          | FY 2017           | FY 2018<br>Base  | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020       | FY 2021 | FY 2022 | To<br>Complete | Total   |
|--|----------------|------------------|-------------------|------------------|------------------|------------------|-----------------|---------------|---------|---------|----------------|---------|
| Procurement Quantity (Units in Each)           | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 23.973           | 25.287            | 25.985           | 0.700            | 26.685           | 26.449          | 26.918        | 27.402  | 27.896  | -              | 184.610 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Net Procurement (P-1) (\$ in Millions)         | -              | 23.973           | 25.287            | 25.985           | 0.700            | 26.685           | 26.449          | 26.918        | 27.402  | 27.896  | -              | 184.610 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Total Obligation Authority (\$ in Millions)    | -              | 23.973           | 25.287            | 25.985           | 0.700            | 26.685           | 26.449          | 26.918        | 27.402  | 27.896  | -              | 184.610 |
| (The following                                 | Resource Sum   | mary rows are fo | r informational p | urposes only. Th | ne corresponding | budget request   | s are documente | d elsewhere.) |         | *       |                |         |
| Initial Spares (\$ in Millions)                | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                 | -                | -                | -                | -               | -             | -       | -       | -              | -       |

## **Description:**

LI 846070 - DARP RC135

RC-135 procurement is executed by the Big Safari RC-135 Program Manager (PDM), and is supported by various contractors. The contractors provide services including Program Depot Maintenance (PDM), prime mission equipment overhaul, special repair activity, in-plant support (sustainment engineering, software engineering, and program management), configuration management, LRU repair, and field service maintenance and training for special operational missions. The RC-135 Program Manager provides the full-range of weapons system management, acquisition oversight, program security and integrated logistics for the RC-135 aircraft, power plant, sensors and associated support and equipment. Due to the rapidly changing global threat environment, the PM has the authority to redirect funding as necessary to meet current stated and emerging Combatant Commander and Intelligence Community (IC) requirements.

Program element associated with this line is 0305207F.

UNCLASSIFIED

Air Force Page 1 of 5 P-1 Line #58

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

846070 / DARP RC135

Support Equip / BSA 6: Special Support Projects

chance and 0400707 Braid Teach

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0305207F

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule                              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017  | FY 2018 Base                             | FY 2018 OCO  | FY 2018 Total                            |
|-----------------|--|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*   | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M)       | Quantity / Total Cost<br>(Each) / (\$ M) | Quantity / Total Cost<br>(Each) / (\$ M)           | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-3a            | 1 / DARP Modification (Capability Improvement) |             |          |                       | - / -                                    | - / 23.973                               | - / 25.287                                     | - / 25.985                               | - / 0.700  | - / 26.685                               |
| P-40            | Total Gross/Weapon System Cost                 |             |          |                       | - 1 -                                    | - / 23.973                               | - / 25.287                                     | - / 25.985                               | - / 0.700  | - / 26.685                               |
|                 |  |             |          |                       |  |  |  |  |  |  |
|                 | Exhibits Schedule                              |             |          |                       | FY 2019                                  | FY 2020                                  | FY 2021  | FY 2022                                  | To Complete  | Total                                    |
| Exhibit<br>Type | Exhibits Schedule  Title*                      | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost (Each) / (\$ M)    | Quantity / Total Cost (Each) / (\$ M)    | FY 2021  Quantity / Total Cost (Each) / (\$ M) | Quantity / Total Cost (Each) / (\$ M)    | To Complete  Quantity / Total Cost (Each) I (\$ M) | Quantity / Total Cost (Each) / (\$ M)    |
|                 |  | Subexhibits | 1 1      | MAIS                  | Quantity / Total Cost                    | Quantity / Total Cost                    | Quantity / Total Cost                          | Quantity / Total Cost                    | Quantity / Total Cost                              | Quantity / Total Cost                    |

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

LI 846070 - DARP RC135

FY18 procurement funding acquires and installs various upgrade and enhancement modifications for ground support equipment associated with the RC-135 program. This ground support equipment is directly tied to fielded baselines of the RC-135 V/W RIVET JOINT, RC-135S COBRA BALL, and the RC-135U COMBAT SENT. The requirement to maintain commonality with fielded baselines necessitates the continuous modification and installation of upgrades concurrent with RC-135 aircraft entering operational status. These ground systems are critical to the post-mission processing of highly perishable intelligence information, and supporting aircrew proficiency training, virtual simulation exercises that contribute to distributed mission training initiatives, and provide support to indigenous maintenance during aircraft deployments to "bare-base" locations. Additionally, all applicable ground support equipment is required to comply with NSA intelligence data recording formats and requirements due to the nature and sensitivity of the information

Ground support equipment includes, but is not limited to: RIVET JOINT Mission Trainer (RJMT), Ground Data Processing System (GDPS), Mission Crew Training System (MCTS), Modular Processing System (MPS), and the Airborne Capability Extension System (ACES).

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Air Force Page 2 of 5 P-1 Line #58

| Exhibit P-3a, Individual Modification: FY 2018 Air Force              |  | Date: May 2017                                     |
|---|--|--|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6 | P-1 Line Item Number / Title:<br>846070 / DARP RC135 | Modification Number / Title: 1 / DARP Modification |
|   |  |  |

| ID Code (A=Service Ready, B=Not Service Ready) | Prior FY 2018 FY 20 |                  |                    |                   |                  |                  | MDAP/MAIS Code: |                |         |         |                |       |  |  |
|--|---------------------|------------------|--------------------|-------------------|------------------|------------------|-----------------|----------------|---------|---------|----------------|-------|--|--|
| Resource Summary                               | _                   | FY 2016          | FY 2017            |                   | FY 2018<br>OCO   | FY 2018<br>Total | FY 2019         | FY 2020        | FY 2021 | FY 2022 | To<br>Complete | Total |  |  |
| Procurement Quantity (Units in Each)           | -                   | -                | -                  | -                 | -                | -                | -               | -              | -       | -       | -              | -     |  |  |
| Gross/Weapon System Cost (\$ in Millions)      | -                   | 23.973           | 25.287             | 25.985            | 0.700            | 26.685           | -               | -              | -       | -       | -              | -     |  |  |
| Less PY Advance Procurement (\$ in Millions)   | -                   | -                | -                  | -                 | -                | -                | -               | -              | -       | -       | -              | -     |  |  |
| Net Procurement (P-1) (\$ in Millions)         | -                   | 23.973           | 25.287             | 25.985            | 0.700            | 26.685           | -               | -              | -       | -       | -              | -     |  |  |
| Plus CY Advance Procurement (\$ in Millions)   | -                   | -                | -                  | -                 | -                | -                | -               | -              | -       | -       | -              | -     |  |  |
| Total Obligation Authority (\$ in Millions)    | -                   | 23.973           | 25.287             | 25.985            | 0.700            | 26.685           | -               | -              | -       | -       | -              | -     |  |  |
| (The following                                 | g Resource Sum      | mary rows are fo | or informational p | ourposes only. Th | ne corresponding | budget request   | s are documente | ed elsewhere.) |         | -       |                |       |  |  |
| Initial Spares (\$ in Millions)                | -                   | -                | -                  | -                 | -                | -                | -               | -              | -       | -       | -              | -     |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions) | -                   | -                | -                  | -                 | -                | -                | -               | -              | -       | -       | -              | -     |  |  |

### **Description:**

RC-135 procurement is executed by the Big Safari RC-135 Program Manager (PM) and is supported by various contractors. The contractors provide services including Program Depot Maintenance (PDM), prime mission equipment overhaul, special repair activity, in-plant support (sustainment engineering, software engineering, and program management), configuration management, LRU repair, and field service maintenance and training for special operational missions. The RC-135 Program Manager provides the full-range of weapons system management, acquisition oversight, program security and integrated logistics for the RC-135 aircraft, power plant, sensors and associated support and equipment. Due to the rapidly changing global threat environment, the PM has the authority to redirect funding as necessary to meet current stated and emerging Combatant Commander and Intelligence Community (IC) requirements.

FY18 procurement funding acquires and installs various upgrade and enhancement modifications for ground support equipment associated with the RC-135 program. This ground support equipment is directly tied to fielded baselines of the RC-135 V/W RIVET JOINT, RC-135S COBRA BALL, and the RC-135U COMBAT SENT. The requirement to maintain commonality with fielded baselines necessitates the continuous modification and installation of upgrades concurrent with RC-135 aircraft entering operational status. These ground systems are critical to the post-mission processing of highly perishable intelligence information, and supporting aircrew proficiency training, virtual simulation exercises that contribute to distributed mission training initiatives, and provide support to indigenous maintenance during aircraft deployments to "bare-base" locations. Additionally, all applicable ground support equipment is required to comply with NSA intelligence data recording formats and requirements due to the nature and sensitivity of the information.

Ground support equipment includes, but is not limited to: RIVET JOINT Mission Trainer (RJMT), Ground Data Processing System (GDPS), Mission Crew Training System (MCTS), Modular Processing System (MPS), and the Airborne Capability Extension System (ACES).

Milestone/Development Status

Fully Fielded Systems

LI 846070 - DARP RC135

Air Force

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P-1 Line #58

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force  | <b>Date:</b> May 2017                              |
|---|--|
| Appropriation / Budget Activity / Budget Sub Activity:  3080F / 04 / 6  P-1 Line Item Number / Title: 846070 / DARP RC135 | Modification Number / Title: 1 / DARP Modification |

| ID Code (A=Service Ready, B=Not Service Ready):   |                                   |                                   |                                   |                                   | MD                                | AP/MAIS Co                        | ode:                              |                                   |                                   |                                   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Models of Systems Affected: RC135                 |                                   | Modifi                            | cation Typ                        | e: Capabil                        | lity Improve                      | ement                             | Re                                | lated RDT                         | <b>&amp;E PEs</b> : 0             | 305207F                           |                                   |                                   |
|   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                             |
| Financial Plan                                    | Qty (Each) I<br>Total Cost (\$ M) |
| Procurement                                       |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
| Modification Item 1 of 1: BL12 Ground Systems     |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
| A Kits  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
| Recurring   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
| BL12 Ground Systems:INSTALL KITS Group A (Active) | - 1 -                             | 1 / 6.000                         | 1 / 6.322                         | 1 / 5.916                         | - /0.700                          | 1 / 6.616                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| Subtotal: Recurring                               | - / -                             | - /6.000                          | - /6.322                          | - /5.916                          | - /0.700                          | - /6.616                          | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             |
| B Kits  |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
| Recurring   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
| BL12 Ground Systems:EQUIPMENT Group B (Active)    | - 1 -                             | 1 / 16.901                        | 1 / 17.893                        | 1 / 18.997                        | - / -                             | 1 / 18.997                        | - 1 -                             | - / -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| Subtotal: Recurring                               | - / -                             | - /16.901                         | - /17.893                         | - /18.997                         | - / -                             | - /18.997                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             |
| Subtotal: BL12 Ground Systems                     | - / -                             | - /22.901                         | - /24.215                         | - /24.913                         | - /0.700                          | - /25.613                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             |
| Subtotal: Procurement, All Modification Items     | - / -                             | - /22.901                         | - /24.215                         | - /24.913                         | - /0.700                          | - /25.613                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             |
| Installation                                      | <u>'</u>                          |                                   |                                   |                                   |                                   |                                   |                                   | <u> </u>                          | <u> </u>                          | <u> </u>                          | <u> </u>                          | <u>`</u>                          |
| Modification Item 1 of 1: BL12 Ground Systems     | - 1 -                             | 1 / 1.072                         | 1 / 1.072                         | 1 / 1.072                         | - 1 -                             | 1 / 1.072                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             |
| Subtotal: Installation                            | - / -                             | 1 / 1.072                         | 1 / 1.072                         | 1/1.072                           | - / -                             | 1 / 1.072                         | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             | - / -                             |
| Total   | ,                                 |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |                                   |
| Total Cost (Procurement + Support + Installation) | -                                 | 23.973                            | 25.287                            | 25.985                            | 0.700                             | 26.685                            | _                                 | -                                 | _                                 | _                                 | _                                 | -                                 |

Exhibit P-3a, Individual Modification: FY 2018 Air Force **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 3080F / 04 / 6 846070 / DARP RC135 1 / DARP Modification ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code: Modification Item 1 of 1: BL12 Ground Systems Manufacturer Information Manufacturer Name: L3 Communications Manufacturer Location: Greenville, TX Administrative Leadtime (in Months): 2 Production Leadtime (in Months): 6 **Dates** FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 **Contract Dates** Dec 2015 Dec 2016 Dec 2017

Jun 2018

#### Installation Information

**Delivery Dates** 

Method of Implementation: Contractor Facility

Jun 2016

Jun 2017

|                   | Prior Years                       | FY 2016                           | FY 2017                           | FY 2018<br>Base                   | FY 2018<br>OCO                    | FY 2018<br>Total                  | FY 2019                           | FY 2020                           | FY 2021                           | FY 2022                           | To<br>Complete                    | Total                            |
|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| Installation Cost | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M |
| Prior Years       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| FY 2016           | - 1 -                             | 1 / 1.072                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| FY 2017           | - 1 -                             | - 1 -                             | 1 / 1.072                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| FY 2018           | - 1 -                             | - 1 -                             | - 1 -                             | 1 / 1.072                         | - 1 -                             | 1 / 1.072                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| FY 2019           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| FY 2020           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| FY 2021           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| FY 2022           | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| To Complete       | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                            |
| Total             | - 1 -                             | 1 / 1.072                         | 1 / 1.072                         | 1 / 1.072                         | - 1 -                             | 1 / 1.072                         | - 1 -                             | - 1 -                             | - 1 -                             | - 1 -                             | - / -                             | - 1 -                            |

#### Installation Schedule

|     |     |    | FY 2 | 2016 |    |    | FY 2 | 2017 |    |    | FY 2 | 2018 |    |    | FY 2 | 2019 |    |    | FY 2 | 2020 |    |    | FY 2 | 2021 |    |    | FY 2 | 2022 |    |    |     |
|-----|-----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|------|------|----|----|-----|
|     | PYS | Q1 | Q2   | Q3   | Q4 | тс | Tot |
| In  | 0   | -  | 1    | -    | -  | -  | 1    | -    | -  | -  | 1    | -    | -  | -  | 1    | -    | -  | -  | 1    | -    | -  | -  | 1    | -    | -  | -  | 1    | -    | -  | 0  | 7   |
| Out | 0   | -  | -    | -    | 1  | -  | -    | -    | 1  | -  | -    | -    | 1  | -  | -    | -    | 1  | -  | -    | -    | 1  | -  | -    | -    | 1  | -  | -    | -    | 1  | 0  | 7   |

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

846080 / DCGS-AF

Support Equip / BSA 6: Special Support Projects

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0305208F

Other Related Program Elements: 0305208F, 0305240F

Line Item MDAP/MAIS Code: N/A

|  | Prior          |                  |                    | FY 2018          | FY 2018          | FY 2018           |                        |                        |                        |                        | То       |                          |
|--|----------------|------------------|--------------------|------------------|------------------|-------------------|------------------------|------------------------|------------------------|------------------------|----------|--------------------------|
| Resource Summary                               | Years          | FY 2016          | FY 2017            | Base             | oco              | Total             | FY 2019                | FY 2020                | FY 2021                | FY 2022                | Complete | Total                    |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -        | -                        |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 177.021          | 198.455            | 178.423          | 9.200            | 187.623           | 159.085 <sup>(a)</sup> | 151.591 <sup>(b)</sup> | 154.322 <sup>(c)</sup> | 157.109 <sup>(d)</sup> | -        | 1,185.206 <sup>(e)</sup> |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -        | -                        |
| Net Procurement (P-1) (\$ in Millions)         | -              | 177.021          | 198.455            | 178.423          | 9.200            | 187.623           | 159.085                | 151.591                | 154.322                | 157.109                | -        | 1,185.206                |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -        | -                        |
| Total Obligation Authority (\$ in Millions)    | -              | 177.021          | 198.455            | 178.423          | 9.200            | 187.623           | 159.085                | 151.591                | 154.322                | 157.109                | -        | 1,185.206                |
| (The followin                                  | g Resource Sum | mary rows are fo | or informational p | urposes only. Ti | he corresponding | g budget request: | s are documente        | ed elsewhere.)         |                        |                        | ĺ        |                          |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -        | -                        |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -        | -                        |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                 | -                      | -                      | -                      | -                      | -        | -                        |

### Description:

Air Force Distributed Common Ground System (AF DCGS)/PE0305208F is the Combat Air Force (CAF) weapon system architecture for planning and direction, collection, processing and exploitation, analysis and production, and dissemination (PCPAD) of data from Intelligence, Surveillance, and Reconnaissance (ISR) missions. Since AF DCGS is also a major component of the DoD DCGS, the system is designed to complement and interoperate with the DoD. Army. Navy and Marine Corps DCGS. The AF DCGS mission is to provide Joint Task Force (JTF) Commanders. Air Component Commanders. Unified Commands. and other directed organizations with global, time-sensitive ISR PCPAD across the spectrum of military operations. AF DCGS is a multi-INT network linked weapon system (AN/GSQ-272) capable of exploiting intelligence data from manned platforms, remotely piloted aircraft (RPA), non-traditional ISR platforms, national and commercial satellites, and other collection systems. AF DCGS is designed to support joint operational requirements by providing a common PCPAD means to provide time-sensitive intelligence to field commanders and in support of the Air Operations Center (AOC) mission requirements. Currently, the AF DCGS worldwide architecture is composed of two worldwide core sites, three regional core sites, two remote Air Force Forces (AF FOR) sites, four National Mission Partner (NMP) sites, three support sites, and multiple National Guard Bureau (NGB) sites. Currently, AF DCGS is supporting ongoing operations from forward deployed and in-garrison CONUS and OCONUS based locations. The system employs a concept of data distribution, information sharing and collaborative work centers. AF DCGS provides the national leadership and the warfighter with integrated and interoperable national and airborne reconnaissance by providing quality and fused Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT), and Geospatial Intelligence (GEOINT) tailored to the warfighter for all levels of conflict

AF DCGS is transforming by integrating the necessary technologies and tools to provide increased capabilities and meet emerging and urgent operational needs. These efforts will also integrate commercial-offthe-shelf and government-off-the-shelf upgrades to provide current technologies and achieve necessary application services. The next series of upgrades will meet the operational need to integrate new and/or improved sensor capabilities, as well as enhance interoperability by migrating to an Open Architecture (OA) to improve data sharing ability per DoD direction.

AF DCGS is managed in eight efforts: GEOINT (GB 4.1), GEOINT Transformation, Systems Release (SR 3.0), SIGINT Transformation, Sensor Integration, Multi-INT, Infrastructure Transformation, and DCGS Reference Imagery Transition (DRT):

- 1. GB 4.1: The GEOINT Baseline 4.1 (GB4.1) effort completes the Bulk Release process and provides a common baseline across the weapon system. It also integrates Airborne Cuing and Exploitation System, Hyper Spectral ACES-HY (MQ-1) and Global Hawk Block 40 capability into AF DCGS.
- 2. GEOINT Transformation: The GEOINT Transformation effort rapidly integrates new capabilities and migrates GEOINT-specific applications & capabilities into the open architecture framework.
- 3. \*SR 3.0: The Systems Release (3.0) effort completes SIGINT Bulk Release process and provides a common baseline across the weapon system. Provides the ability to PCPAD the Airborne Signals Intelligence Payload (ASIP) family of systems and integrates the Common Intelligence Collections System (CICS) capability.

LI 846080 - DCGS-AF Air Force

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Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

846080 / DCGS-AF

Support Equip / BSA 6: Special Support Projects

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0305208F

Other Related Program Elements: 0305208F, 0305240F

Line Item MDAP/MAIS Code: N/A

- 4. SIGINT Transformation: Rapidly integrate new capabilities, leverage mission partner methods and tools, exchange data, and migrate the SIGINT-specific applications/capabilities into the open architecture framework.
- 5. Sensor Integration: The Sensor Integration effort rapidly integrates AF, Joint, & Coalition Sensor data into DCGS Enterprise to ingest data, perform sensor planning, and Command & Control.
- 6. Multiple-Intelligence(Multi-INT): Provides and supports Open Architecture-based Enterprise Services, moves to commodity hardware, a virtual desktop environment, and facilitates enterprise-wide collaborative tools.
- 7. Network Infrastructure Transformation: The Infrastructure Transformation effort modernizes the AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward a cloud architecture.
- 8. DRT: The Air Force DCGS Reference Imagery Transition (DRT) effort provides data ingest, transfer, and storage capabilities for NGA reference imagery data.

NOTE: \*Since FY18 appropriation is under \$5M in the budget year, system limitations prevent the P-3A from being displayed.

Detailed information on PE 0305240F, Support to DoD DCGS Enterprise remains classified and will be provided on a need-to-know basis.

Funding for this exhibit Line Item #846080 is contained in PEs 0305208F and 0305240F.

FY17 funding totals include \$0.8M for Overseas Contingence Operations FY18 funding totals include \$9.2M for Overseas Contingence Operations

Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L.), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

| Seconda                | ary Distribution           | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total | FY 2019 | FY 2020 | FY 2021 | FY 2022 |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|---------|---------|---------|---------|
| AF                     | Quantity                   | 0       | 0       | 0               | 0              | 0                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 173.521 | 190.955 | 167.823         | 9.200          | 177.023          | 123.111 | 129.507 | 131.839 | 134.220 |
| AFNG                   | Quantity                   | 0       | 0       | 0               | 0              | 0                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 3.500   | 7.500   | 10.600          | 0.000          | 10.600           | 14.300  | -       | -       | -       |
| AFR                    | Quantity                   | 0       | 0       | 0               | 0              | 0                | -       | -       | -       | -       |
|                        | Total Obligation Authority | 0.000   | 0.000   | 0.000           | 0.000          | 0.000            | -       | -       | -       | -       |
| Total:                 | Quantity                   | 0       | 0       | 0               | 0              | 0                | -       | -       | -       | -       |
| Secondary Distribution | Total Obligation Authority | 177.021 | 198.455 | 178.423         | 9.200          | 187.623          | 137.411 | 129.507 | 131.839 | 134.220 |

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

846080 / DCGS-AF

Support Equip / BSA 6: Special Support Projects

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0305208F

Other Related Program Elements: 0305208F, 0305240F

Line Item MDAP/MAIS Code: N/A

|                 | Exhibits Schedule   |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|---|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*  | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-40a           | Distributed Common Ground/Surface Systems                                   |             |          |                       | - / 0.000                                | - / 39.507                               | - / 47.412                               | - / 12.770                               | - / 1.800                                | - / 14.570                               |
| P-3a            | 1 / GEOINT Transformation (GEOINT) (Reliability & Maintainability)          |             |          |                       | - / -                                    | - / 14.478                               | - /8.085                                 | - / 18.796                               | - / 0.000                                | - / 18.796                               |
| P-3a            | 2 / Network Infrastructure Transformation (Reliability & Maintainability)   |             |          |                       | - / -                                    | - / 74.182                               | - / 64.935                               | - / 106.550                              | - / 0.000                                | - / 106.550                              |
| P-3a            | 3 / Signals Intelligence (SIGINT) (Reliability & Maintainability)           |             |          |                       | - / -                                    | - / 0.236                                | - /29.092                                | - /8.114                                 | - /7.400                                 | - / 15.514                               |
| P-3a            | 4 / DCGS Reference Imagery Transition (DRT) (Reliability & Maintainability) |             |          |                       | - / -                                    | - / 16.799                               | - / 19.064                               | - / 10.900                               | - / 0.000                                | - / 10.900                               |
| P-40a           | Support to DCGS Enterprise  |             |          |                       | - / -                                    | - / 31.819                               | - / 29.867                               | - /21.293                                | - / 0.000                                | - /21.293                                |
| P-40            | Total Gross/Weapon System Cost  |             |          |                       | - 1 -                                    | - / 177.021                              | - / 198.455                              | - / 178.423                              | - / 9.200                                | - / 187.623                              |

\*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

Where applicable, justification for individual modifications is provided in the P-3A exhibits.

Efforts with funding starting in FY 2019 through FY 2022 are summarized on the P-40. Not all details of this funding are included in this P-40 exhibit set. A summary of the excepted details is as follows:

(a) FY 2019 Cost Delta: 159.085 million

(b) FY 2020 Cost Delta: 151.591 million

(c) FY 2021 Cost Delta: 154.322 million

(d) FY 2022 Cost Delta: 157.109 million

(e) FY Total Cost Delta: 1,185.206 million

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P-1 Line #59

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: FY 2018 Air Force

P-1 Line Item Number / Title:

3080F / 04 / 6

846080 / DCGS-AF

Aggregated Modification Items Title:

Distributed Common Ground/Surface

Systems

**Date:** May 2017

|   |          |                       | P         | rior Years    | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ' 2018 Bas    | se                      | FY        | 2018 OC              | 0                       | FY        | 2018 To       | tal                     |
|---|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|----------------------|-------------------------|-----------|---------------|-------------------------|
| Item Number / Title   | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | <b>Qty</b><br>(Each) | Total<br>Cost<br>(\$ M) | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| DCGS1 / Geospatial<br>Intelligence Bulk Release<br>(GB) 4.1 |          |                       | -         | -             | -                       | -         | -             | 6.120                   | -         | -             | 0.004                   | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.00                    |
| Secondary Distribution                                      |          |                       |           |               |                         |           |               |                         |           | ,             |                         |           |               |                         |           |                      |                         |           |               |                         |
| AF  |          |                       |           | -             | -                       |           | -             | 6.120                   |           | -             | 0.004                   |           | -             | 0.000                   |           | -                    | 0.000                   |           | -             | 0.000                   |
| DCGS13 / NASIC  |          |                       | -         | -             | -                       | -         | -             | -                       | -         | -             | 0.800                   | -         | -             | 0.000                   | -         | -                    | 1.800                   | -         | -             | 1.800                   |
| Secondary Distribution                                      |          |                       |           |               |                         |           |               |                         |           | ,             |                         |           |               |                         |           |                      |                         |           |               |                         |
| AF  |          |                       |           | -             | -                       |           | -             | -                       |           | -             | 0.800                   |           | -             | 0.000                   |           | -                    | 1.800                   |           | -             | 1.800                   |
| DCGS4 / Multi-Intelligence<br>(Multi-INT)                   |          |                       | -         | -             | -                       | -         | -             | 15.616                  | -         | -             | 11.032                  | -         | -             | 6.732                   | -         | -                    | 0.000                   | -         | -             | 6.732                   |
| Secondary Distribution                                      |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |
| AF  |          |                       |           | -             | -                       |           | -             | 15.616                  |           | -             | 11.032                  |           | -             | 6.732                   |           | -                    | 0.000                   |           | -             | 6.732                   |
| DCGS5 / Sensor<br>Integration                               |          |                       | -         | -             | -                       | -         | -             | 8.762                   | -         | -             | 20.179                  | -         | -             | 6.038                   | -         | -                    | 0.000                   | -         | -             | 6.038                   |
| Secondary Distribution                                      |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |                      |                         |           |               |                         |
| AF  |          |                       |           | -             | -                       |           | -             | 8.762                   |           | -             | 20.179                  |           | -             | 6.038                   |           | -                    | 0.000                   |           | -             | 6.038                   |
| DCGS6 / System Release<br>(SR) 3.0                          |          |                       | -         | -             | -                       | -         | -             | 9.009                   | -         | -             | 15.397                  | -         | -             | 0.000                   | -         | -                    | 0.000                   | -         | -             | 0.000                   |
| Secondary Distribution                                      |          |                       |           |               | *                       | •         |               |                         |           | ,             |                         |           |               |                         |           |                      |                         | *         |               | *                       |
| AF  |          |                       |           | -             | -                       |           | -             | 9.009                   |           | -             | 15.397                  |           | -             | 0.000                   |           | -                    | 0.000                   |           | -             | 0.000                   |
| Total   |          |                       | - 1       | -             | 0.000                   | -         | -             | 39.507                  | -         | -             | 47.412                  | -         | -             | 12.770                  | -         | -                    | 1.800                   | -         | -             | 14.570                  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

### **Modification Information:**

| Item Number / Title                                      | Models of Systems Affected | Modification Type             |
|--|----------------------------|-------------------------------|
| DCGS1 / Geospatial Intelligence Bulk<br>Release (GB) 4.1 | 0305208F                   | Reliability & Maintainability |
| DCGS13 / NASIC   | 0305208F                   | Reliability & Maintainability |
| DCGS4 / Multi-Intelligence (Multi-INT)                   | 0305208F                   | Reliability & Maintainability |
| DCGS5 / Sensor Integration                               | 0305208F                   | Reliability & Maintainability |
| DCGS6 / System Release (SR) 3.0                          | 0305208F                   | Reliability & Maintainability |

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P-1 Line #59

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| Appropriation / Budget Activity / Budget Sub Activity:  3080F / 04 / 6  P-1 Line Item Number / Title: 846080 / DCGS-AF | Modification Number / Title: 1 / GEOINT Transformation (GEOINT) |
|--|---|

| 3000F 7 04 7 0   | 040000 I D                 | CGS-AF                    |                            | 17 0         | COINT TIAIISIOITIA | ation (GEOINT) |
|--|----------------------------|---------------------------|----------------------------|--------------|--------------------|----------------|
| ID Code (A=Service Ready, B=Not Service Ready):          | ·                          | N                         | DAP/MAIS Code:             |              |                    |                |
| Resource Summary   | Prior Years                | FY 2016                   | FY 2017                    | FY 2018 Base | FY 2018 OCO        | FY 2018 Total  |
| Procurement Quantity (Units in Each)                     | -                          | -                         | -                          | -            | -                  | -              |
| Gross/Weapon System Cost (\$ in Millions)                | -                          | 14.478                    | 8.085                      | 18.796       | 0.000              | 18.796         |
| Less PY Advance Procurement (\$ in Millions)             | -                          | -                         | -                          | -            | -                  | -              |
| Net Procurement (P-1) (\$ in Millions)                   | -                          | 14.478                    | 8.085                      | 18.796       | 0.000              | 18.796         |
| Plus CY Advance Procurement (\$ in Millions)             | -                          | -                         | -                          | -            | -                  | -              |
| Total Obligation Authority (\$ in Millions)              | -                          | 14.47                     | 8.085                      | 18.796       | 0.000              | 18.796         |
| (The following Resource Summary rows are for information | onal purposes only. The co | rresponding budget reques | ts are documented elsewher | re.)         |                    |                |
| Initial Spares (\$ in Millions)                          | -                          | -                         | -                          | -            | -                  | -              |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                          | -                         | -                          | -            | -                  | -              |

### **Description:**

The Geospatial Intelligence (GEOINT)Transformation effort rapidly integrates new capabilities and migrates GEOINT-specific applications & capabilities into the open architecture framework. Furthermore, GEOINT Transformation provides continuous and incremental improvement to the capability for planning and direction, collection, processing and exploitation, analysis and production, and dissemination (PCPAD) of advanced imagery intelligence. GEOINT Transformation builds upon GB4.1 to integrate new sensors, provide enhanced processing techniques, and provide imagery analysts the advanced capability to exploit, analyze, produce, and disseminate imagery.

#### Justification:

AF DCGS's GEOINT program's main focus is the procurement and fielding of proven technologies for multiple programs including GEOINT Transformation. The GEOINT Transformation leverages an agile infrastructure to use modern information technology (IT) practices and sets the stage from which to accomplish the goals of the AF DCGS architecture roadmap in manageable increments. GEOINT Transformation builds on the GB4.1 foundation to provide enhanced front-end image processing and advanced exploitation tools, which improve the timeliness and quality of GEOINT products, making them more useful to the war-fighter while simultaneously reducing the workload on the DCGS operator.

Milestone/Development Status

AF DCGS is in the Operations and Sustainment phase of the acquisition lifecycle. The weapon system has been declared FOC, and all modifications are being implemented in accordance with AFI 63-101.

|                        | 1 ,                        | 1 7     |         | 0 1             |                |                  |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
| AF                     | Quantity                   | -       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 14.478  | 8.085   | 18.796          | 0.000          | 18.796           |
|                        | Quantity                   | -       | -       | -               | -              | -                |
| Secondary Distribution | Total Obligation Authority | 14.478  | 8.085   | 18.796          | 0.000          | 18.796           |

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| Exhibit P-3a, Individual Modification: FY               | 2018 Air Force                    |  |  |                                   | Date: May 2017  |                                   |  |  |
|---|-----------------------------------|--|--|-----------------------------------|---|-----------------------------------|--|--|
| Appropriation / Budget Activity / Budget 3080F / 04 / 6 | Sub Activity:                     | P-1 Line Item Numb<br>846080 / DCGS-AF | er / Title:                                    |                                   | Modification Number / Title: 1 / GEOINT Transformation (GEOINT) |                                   |  |  |
| ID Code (A=Service Ready, B=Not Service Ready):         |                                   | 1                                      | MDAP/MAIS Co                                   | de:                               |   |                                   |  |  |
| Models of Systems Affected: DCGS                        | Modif                             | ication Type: Reliabili                | ty & Maintainability                           | Related RDT                       | Related RDT&E PEs:  |                                   |  |  |
|   | Prior Years                       | FY 2016                                | FY 2017  | FY 2018 Base                      | FY 2018 OCO   | FY 2018 Total                     |  |  |
| Financial Plan  | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)      | Qty (Each) I<br>Total Cost (\$ M)              | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)                               | Qty (Each) I<br>Total Cost (\$ M) |  |  |
| Procurement   |                                   |  | <u>.                                      </u> |                                   |   |                                   |  |  |
| Modification Item 1 of 1: GEOINT Transformation         |                                   | _                                      |  |                                   |   |                                   |  |  |
| B Kits  |                                   |  |  |                                   |   |                                   |  |  |
| Recurring   |                                   |  |  |                                   |   |                                   |  |  |
| GEOINT Transformation:EQUIPMENT Group B (Active)        | - 1 -                             | 0 / 13.050                             | 0 / 6.900                                      | 0 / 18.100                        | 0 / 0.000   | 0 / 18.100                        |  |  |
| Subtotal: Recurring                                     | - / -                             | - /13.050                              | - /6.900                                       | - /18.100                         | - /0.000  | - /18.100                         |  |  |
| Subtotal: GEOINT Transformation                         | - / -                             | - /13.050                              | - /6.900                                       | - /18.100                         | - /0.000  | - /18.100                         |  |  |
| Subtotal: Procurement, All Modification Items           | - / -                             | - /13.050                              | - /6.900                                       | - /18.100                         | - /0.000  | - /18.100                         |  |  |
| Support (All Modification Items)                        |                                   |  |  |                                   |   |                                   |  |  |
| PMA - Other Gov't Costs                                 | - 1 -                             | - /0.042                               | - / 0.057                                      | - /0.033                          | - /0.000  | - / 0.033                         |  |  |
| PMA - Contractor Services                               | - 1 -                             | - /1.386                               | - <i>I</i> 1.128                               | - /0.663                          | - 1 -   | - / 0.663                         |  |  |
| Subtotal: Support                                       | - / -                             | - /1.428                               | - /1.185                                       | - /0.696                          | - /0.000  | - /0.696                          |  |  |
| Installation  |                                   |  |  |                                   |   |                                   |  |  |
| Subtotal: Installation                                  | - / -                             | - / -                                  | - / -  | - / -                             | - / -   | - / -                             |  |  |
| Total   |                                   |  | ,  |                                   |   |                                   |  |  |
| Total Cost (Procurement + Support + Installation)       | -                                 | 14.478                                 | 8.085  | 18.796                            | 0.000   | 18.796                            |  |  |

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|--|---|------------------------------------|---|
| Exhibit P-3a, Individual Modification: F               |   | Date: May 2017                     |   |
| Appropriation / Budget Activity / Budge 3080F / 04 / 6 | t Sub Activity: P-1 Line It<br>846080 / D | tem Number / Title:<br>OCGS-AF     | Modification Number / Title: 1 / GEOINT Transformation (GEOINT) |
| ID Code (A=Service Ready, B=Not Service Ready):        |   | MDAP/MAIS Code:                    |   |
| Modification Item 1 of 1: GEOINT Transformation        |   |                                    |   |
| Manufacturer Information                               |   |                                    |   |
| Manufacturer Name: Various                             |   | Manufacturer Location: Robins AFE  | 3   |
| Administrative Leadtime (in Months): 0                 |   | Production Leadtime (in Months): 0 |   |
| Dates  | FY 2016                                   | FY 2017                            | FY 2018   |
| Contract Dates   |   |                                    |   |
| Delivery Dates   |   |                                    |   |
| Installation Information                               |   |                                    |   |
| Method of Implementation (Organic): Org/Intermed       |   |                                    | Installation Quantity: 0  |
|  |   |                                    |   |
|  |   |                                    |   |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force |                               | Date: May 2017                            |
|--|-------------------------------|---|
| Appropriation / Budget Activity / Budget Sub Activity:   | P-1 Line Item Number / Title: | Modification Number / Title:              |
| 3080F / 04 / 6   | 846080 / DCGS-AF              | 2 / Network Infrastructure Transformation |

| 30001 7 04 7 0                                      | 0400001 D                       | 0400007 000074         |                             |              | 27 Network initiastructure Transformation |               |  |
|---|---------------------------------|------------------------|-----------------------------|--------------|---|---------------|--|
| ID Code (A=Service Ready, B=Not Service Ready):     | •                               | 1                      | MDAP/MAIS Code:             | •            |   |               |  |
| Resource Summary                                    | Prior Years                     | FY 2016                | FY 2017                     | FY 2018 Base | FY 2018 OCO                               | FY 2018 Total |  |
| Procurement Quantity (Units in Each)                | -                               |                        |                             | -            | -   | -             |  |
| Gross/Weapon System Cost (\$ in Millions)           | -                               | 74.1                   | 64.935                      | 106.550      | 0.000                                     | 106.550       |  |
| Less PY Advance Procurement (\$ in Millions)        | -                               |                        | -                           | -            | -   | -             |  |
| Net Procurement (P-1) (\$ in Millions)              | -                               | 74.1                   | 64.935                      | 106.550      | 0.000                                     | 106.550       |  |
| Plus CY Advance Procurement (\$ in Millions)        | -                               |                        | -                           | -            | -   | -             |  |
| Total Obligation Authority (\$ in Millions)         | -                               | 74.1                   | 64.935                      | 106.550      | 0.000                                     | 106.550       |  |
| (The following Resource Summary rows are for infort | mational purposes only. The cor | responding budget requ | ests are documented elsewhe | ere.)        |   |               |  |
| Initial Spares (\$ in Millions)                     | -                               |                        |                             | -            | -   | -             |  |
| Gross/Weapon System Unit Cost (\$ in Millions)      | -                               |                        |                             | -            | -   | -             |  |
|   |                                 |                        |                             | 1            |   |               |  |

### **Description:**

The Infrastructure Transformation effort modernizes the AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward a cloud architecture. Furthermore, the Infrastructure Transformation program adds capabilities to the baseline of the FOC weapon system already fielded and does not replace it.

#### Justification:

AF DCGS's Network Infrastructure Transformation program's main focus is the procurement and fielding of proven technologies for network communications, centralized storage of imagery and full motion video, communication modernization, demilitarized zone, weapon system trainer, and x86 infrastructure and addresses diminishing manufacturing sources (DMS) weapons system issues. This program will continue to deliver an integrated net-centric upgrade to the network communications infrastructure; and address any other DMS issues that are identified with legacy systems/components that AF DCGS must interface with. Additionally, upgrades will meet the operational need to store and disseminate new and/or improved sensor data, and enhance interoperability by migrating to an open architecture construct and improving data sharing ability in compliance with DoD direction.

Milestone/Development Status

AF DCGS is in the Operations and Sustainment phase of the acquisition lifecycle. The weapon system has been declared FOC, and all modifications are being implemented in accordance with AFI 63-101.

|                        |                            | . ,     | -       | 0 1             |                |                  |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
| AF                     | Quantity                   | -       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 70.682  | 57.435  | 95.950          | 0.000          | 95.950           |
| AFNG                   | Quantity                   | -       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 3.500   | 7.500   | 10.600          | -              | 10.600           |
|                        | Quantity                   | -       | -       | -               | -              | -                |
| Secondary Distribution | Total Obligation Authority | 74.182  | 64.935  | 106.550         | 0.000          | 106.550          |

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| Exhibit P-3a, Individual Modification: FY               | Date: May 2017                                    |                                   |                                   |  |                                   |                                   |
|---|---|-----------------------------------|-----------------------------------|--|-----------------------------------|-----------------------------------|
| Appropriation / Budget Activity / Budget 3080F / 04 / 6 | P-1 Line Item Number / Title:<br>846080 / DCGS-AF |                                   |                                   | Modification Number / Title: 2 / Network Infrastructure Transformation |                                   |                                   |
| ID Code (A=Service Ready, B=Not Service Ready):         |   |                                   | MDAP/MAIS Co                      | de:  |                                   |                                   |
| Models of Systems Affected: 0305208F                    | Modif   | fication Type: Reliabili          | ty & Maintainability              | Related RDT  | &E PEs:                           |                                   |
|   | Prior Years                                       | FY 2016                           | FY 2017                           | FY 2018 Base   | FY 2018 OCO                       | FY 2018 Total                     |
| Financial Plan  | Qty (Each) I<br>Total Cost (\$ M)                 | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)                                      | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M) |
| Procurement   |   |                                   |                                   |  |                                   |                                   |
| Modification Item 1 of 1: Network Infrastructure        |   |                                   |                                   |  |                                   |                                   |
| B Kits  |   |                                   |                                   |  |                                   |                                   |
| Recurring   |   |                                   |                                   |  |                                   |                                   |
| Network Infrastructure:EQUIPMENT Group B (Active)       | - 1 -   | 0 / 68.102                        | 0 / 54.463                        | 0 / 91.948   | 0 / 0.000                         | 0 / 91.94                         |
| Network Infrastructure:EQUIPMENT Group B (Guard)        | - 1 -   | 0 / 3.500                         | 0 / 7.500                         | 0 / 10.600   | - 1 -                             | 0 / 10.60                         |
| Subtotal: Recurring                                     | - / -   | - /71.602                         | - /61.963                         | - /102.548   | - /0.000                          | - /102.54                         |
| Subtotal: Network Infrastructure                        | - / -   | - /71.602                         | - /61.963                         | - /102.548   | - /0.000                          | - /102.54                         |
| Subtotal: Procurement, All Modification Items           | - / -   | - /71.602                         | - /61.963                         | - /102.548   | - /0.000                          | - /102.54                         |
| Support (All Modification Items)                        |   |                                   |                                   |  |                                   |                                   |
| PMA - Other Gov't Costs                                 | - 1 -   | - / 0.078                         | - /0.104                          | - / 0.140  | - /0.000                          | - /0.14                           |
| PMA - Contractor Services                               | - 1 -   | - /2.502                          | - /2.868                          | - /3.862   | - 1 -                             | - /3.86                           |
| Subtotal: Support                                       | - / -   | - /2.580                          | - /2.972                          | - /4.002   | - /0.000                          | - /4.00                           |
| Installation  |   |                                   |                                   |  |                                   |                                   |
| Subtotal: Installation                                  | - / -   | - / -                             | - / -                             | - / -  | - / -                             | - / -                             |
| Total   |   |                                   |                                   |  |                                   |                                   |
| Total Cost (Procurement + Support + Installation)       | -   | 74.182                            | 64.935                            | 106.550  | 0.000                             | 106.550                           |

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|--|------------------|--------------------------------------|------------------------------------|---|
| Exhibit P-3a, Individual Modification: F         | Y 2018 Air Force |                                      |                                    | Date: May 2017  |
|  |                  | P-1 Line Item Nui<br>846080 / DCGS-A |                                    | Modification Number / Title:<br>2 / Network Infrastructure Transformation |
| ID Code (A=Service Ready, B=Not Service Ready):  |                  |                                      | MDAP/MAIS Code:                    |   |
| Modification Item 1 of 1: Network Infrastructure |                  |                                      |                                    |   |
| Manufacturer Information                         |                  |                                      |                                    |   |
| Manufacturer Name: Various                       |                  |                                      | Manufacturer Location: Various     |   |
| Administrative Leadtime (in Months): 0           |                  |                                      | Production Leadtime (in Months): 0 |   |
| Dates  | F                | Y 2016                               | FY 2017                            | FY 2018   |
| Contract Dates                                   |                  |                                      |                                    |   |
| Delivery Dates                                   |                  |                                      |                                    |   |
| Installation Information                         |                  |                                      |                                    |   |
| Method of Implementation (Organic): Org/Interme  | diata            |                                      | ln                                 | stallation Quantity: 0  |
|  |                  |                                      |                                    |   |
|  |                  |                                      |                                    |   |

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| Exhibit P-3a, Individual Modification: FY 2018 Air Force  | <b>Date</b> : May 2017   |
|---|--|
| Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6  P-1 Line Item Number / Title: 846080 / DCGS-AF | Modification Number / Title: 3 / Signals Intelligence (SIGINT) |

| 0.0000.2000   |                              |                         |                            |              |             |               |
|---|------------------------------|-------------------------|----------------------------|--------------|-------------|---------------|
| ID Code (A=Service Ready, B=Not Service Ready):       |                              | N                       | DAP/MAIS Code:             |              |             |               |
| Resource Summary                                      | Prior Years                  | FY 2016                 | FY 2017                    | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                  | -                            | -                       | -                          | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)             | -                            | 0.23                    | 29.092                     | 8.114        | 7.400       | 15.514        |
| Less PY Advance Procurement (\$ in Millions)          | -                            | -                       | -                          | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                | -                            | 0.23                    | 3 29.092                   | 8.114        | 7.400       | 15.514        |
| Plus CY Advance Procurement (\$ in Millions)          | -                            | -                       | -                          | -            | -           | -             |
| Total Obligation Authority (\$ in Millions)           | -                            | 0.23                    | 29.092                     | 8.114        | 7.400       | 15.514        |
| (The following Resource Summary rows are for informat | ional purposes only. The cor | responding budget reque | sts are documented elsewhe | re.)         |             |               |
| Initial Spares (\$ in Millions)                       | -                            | -                       | -                          | -            | -           | -             |
| Gross/Weapon System Unit Cost (\$ in Millions)        | -                            | -                       | -                          | -            | -           | -             |

### **Description:**

The Signal Intelligence (SIGINT) Transformation effort rapidly integrates new capabilities, leverage mission partner methods and tools, exchange data, and migrates the SIGINT-specific applications/capabilities to the open architecture framework. The SIGINT Segment provides command and control (C2) of ISR sensors, data processing, and data distribution to the customers in near real time from connected sensors at both core and remote sites.

#### Justification:

AF DCGS SIGINT Transformation's main focus is AF DCGS connectivity to NSANET. In order to accomplish this, SIGINT modernization must take place within the OA DCGS environment. This includes migration of SR3.0 software to an X86 environment and SIGINT workstation modernization. The NSANET project consists of SIGINT Ops on United States Cryptologic System (USCS) network, streaming special signal audio onto NSA domain for DMS sites, AF DCGS near real time tactical capabilities, DCGS/Rivet Joint (RJ) weapons system interoperability, automated language and speaker identification, AF DCGS demultiplexing capability and providing DMS sites with NSANET connectivity.

Milestone/Development Status

AF DCGS is in the Operations and Sustainment phase of the acquisition lifecycle. The weapon system has been declared FOC, and all modifications are being implemented in accordance with AFI 63-101.

| Secondar               | y Distribution             | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 0.236   | 29.092  | 8.114           | 7.400          | 15.514           |
| Total:                 | Quantity                   | -       | -       | -               | -              | =                |
| Secondary Distribution | Total Obligation Authority | 0.236   | 29.092  | 8.114           | 7.400          | 15.514           |

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 P-1 Line #59

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| Exhibit P-3a, Individual Modification: FY                      | <b>Date:</b> May 2017                  |   |                                   |                                   |  |                                   |
|--|--|---|-----------------------------------|-----------------------------------|--|-----------------------------------|
| Appropriation / Budget Activity / Budget 3080F / 04 / 6        | P-1 Line Item Numb<br>846080 / DCGS-AF | P-1 Line Item Number / Title:<br>846080 / DCGS-AF |                                   |                                   | Modification Number / Title: 3 / Signals Intelligence (SIGINT) |                                   |
| ID Code (A=Service Ready, B=Not Service Ready):                |  | 1   | MDAP/MAIS Co                      | de:                               |  |                                   |
| Models of Systems Affected: 0305208F                           | Modif                                  | ication Type: Reliabili                           | ty & Maintainability              | Related RDT                       | <b>&amp;E PEs</b> : 0305208F                                   |                                   |
|  | Prior Years                            | FY 2016   | FY 2017                           | FY 2018 Base                      | FY 2018 OCO  | FY 2018 Total                     |
| Financial Plan   | Qty (Each) I<br>Total Cost (\$ M)      | Qty (Each) I<br>Total Cost (\$ M)                 | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)                              | Qty (Each) I<br>Total Cost (\$ M) |
| Procurement  |  | <u> </u>  | ·                                 |                                   | ,  |                                   |
| Modification Item 1 of 1: Signals Intelligence Transformation  |  |   |                                   |                                   |  |                                   |
| B Kits   |  |   |                                   |                                   |  |                                   |
| Recurring  |  |   |                                   |                                   |  |                                   |
| Signals Intelligence Transformation:EQUIPMENT Group B (Active) | - 1 -                                  | 0 / 0.100   | 0 / 28.454                        | 0 / 7.882                         | 0 / 7.400  | 0 / 15.282                        |
| Subtotal: Recurring  | - / -                                  | - /0.100  | - /28.454                         | - /7.882                          | - /7.400   | - /15.282                         |
| Subtotal: Signals Intelligence Transformation                  | - / -                                  | - /0.100  | - /28.454                         | - /7.882                          | - /7.400   | - /15.282                         |
| Subtotal: Procurement, All Modification Items                  | - / -                                  | - /0.100  | - /28.454                         | - /7.882                          | - /7.400   | - /15.282                         |
| Support (All Modification Items)                               |  | <u>.                                      </u>    | ·                                 |                                   | <u> </u>   |                                   |
| PMA - Contractor Services                                      | - 1 -                                  | - /0.133  | - / 0.618                         | - /0.225                          | - 1 -  | - /0.225                          |
| PMA - Other Gov't Costs  | - 1 -                                  | - /0.003  | - /0.020                          | - / 0.007                         | - 1 -  | - /0.007                          |
| Subtotal: Support  | - / -                                  | - /0.136  | - /0.638                          | - /0.232                          | - / -  | - /0.232                          |
| Installation   |  |   |                                   |                                   |  |                                   |
| Subtotal: Installation   | - / -                                  | - / -   | - / -                             | - / -                             | - / -  | - / -                             |
| Total  |  |   |                                   |                                   |  |                                   |
| Total Cost (Procurement + Support + Installation)              | =                                      | 0.236   | 29.092                            | 8.114                             | 7.400  | 15.514                            |

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|   | Exhibit P-3a, Individual Modification: FY 2018 Air Force |                                  |                                    |  |
|---|--|----------------------------------|------------------------------------|--|
|   |  | P-1 Line Item I<br>846080 / DCGS |                                    | Modification Number / Title: 3 / Signals Intelligence (SIGINT) |
| Code (A=Service Ready, B=Not Service Ready):        |  | 1                                | MDAP/MAIS Code:                    | ,  |
| lodification Item 1 of 1: Signals Intelligence Tran | sformation   |                                  |                                    |  |
| anufacturer Information                             |  |                                  |                                    |  |
| anufacturer Name: various                           |  |                                  | Manufacturer Location: various     |  |
| dministrative Leadtime (in Months): 0               |  |                                  | Production Leadtime (in Months): 0 |  |
| Dates   |  | FY 2016                          | FY 2017                            | FY 2018  |
| ontract Dates                                       |  |                                  |                                    |  |
| elivery Dates                                       |  |                                  |                                    |  |
| stallation Information                              |  |                                  |                                    |  |
| ethod of Implementation (Organic): Org/Interme      | ediate   |                                  | Installat                          | tion Quantity: 0   |
|   |  |                                  |                                    |  |

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P-1 Line #59

| Exhibit P-3a, Individual Modification: FY 2018 Air Force |                               | Date: May 2017                        |
|--|-------------------------------|---------------------------------------|
| Appropriation / Budget Activity / Budget Sub Activity:   | P-1 Line Item Number / Title: | Modification Number / Title:          |
| 3080F / 04 / 6   | 846080 / DCGS-AF              | 4 / DCGS Reference Imagery Transition |
|  |                               | (DRT)                                 |

| ID Code (A=Service Ready, B=Not Service Ready):          |                             | M                        | DAP/MAIS Code:             |              |             |               |
|--|-----------------------------|--------------------------|----------------------------|--------------|-------------|---------------|
| Resource Summary   | Prior Years                 | FY 2016                  | FY 2017                    | FY 2018 Base | FY 2018 OCO | FY 2018 Total |
| Procurement Quantity (Units in Each)                     | -                           | -                        | -                          | -            | -           | -             |
| Gross/Weapon System Cost (\$ in Millions)                | -                           | 16.799                   | 19.064                     | 10.900       | 0.000       | 10.900        |
| Less PY Advance Procurement (\$ in Millions)             | -                           | -                        | -                          | -            | -           | -             |
| Net Procurement (P-1) (\$ in Millions)                   | -                           | 16.799                   | 19.064                     | 10.900       | 0.000       | 10.900        |
| Plus CY Advance Procurement (\$ in Millions)             | -                           | -                        | -                          | -            | -           | =             |
| Total Obligation Authority (\$ in Millions)              | -                           | 16.799                   | 19.064                     | 10.900       | 0.000       | 10.900        |
| (The following Resource Summary rows are for information | onal purposes only. The cor | responding budget reques | ts are documented elsewher | re.)         |             |               |
| Initial Spares (\$ in Millions)                          | -                           | -                        | -                          | -            | -           | =             |
| Gross/Weapon System Unit Cost (\$ in Millions)           | -                           | -                        | -                          | -            | -           | -             |

# **Description:**

The Air Force DCGS Reference Imagery Transition (DRT) effort provides data ingest, transfer, and storage capabilities for National Geospatial Intelligence Agency (NGA) reference imagery data. This effort transitions AF DCGS reference imagery from the Direct Feed Image Product Library (DFIPL) to a centralized storage solution and distributes imagery across the DCGS Enterprise through a cloud architecture consisting of multiple data hubs, known as Data Storage and Dissemination (DSDs). Furthermore, this project will enhance the imagery distribution network of AF DCGS to allow the cloud architecture throughout several sites within the weapon system.

#### Justification:

The AF DRT effort's main focus is the procurement and fielding of proven technologies to centralize the storage and dissemination of imagery for the AF DCGS weapon system. This effort is necessary to transfer the reference imagery data path from the current retiring data path to the long term ACC vision for the weapon system. This effort also enhances the network backbone for the weapon system as it moves toward a cloud architecture for the distribution of data.

Milestone/Development Status

AF DCGS is in the Operations and Sustainment phase of the acquisition lifecycle. The weapon system has been declared FOC, and all modifications are being implemented in accordance with AFI 63-101.

| Seconda                | ry Distribution            | FY 2016 | FY 2017 | FY 2018<br>Base | FY 2018<br>OCO | FY 2018<br>Total |
|------------------------|----------------------------|---------|---------|-----------------|----------------|------------------|
| AF                     | Quantity                   | -       | -       | -               | -              | -                |
|                        | Total Obligation Authority | 16.799  | 19.064  | 10.900          | 0.000          | 10.900           |
| Total:                 | Quantity                   | -       | -       | -               | -              | -                |
| Secondary Distribution | Total Obligation Authority | 16.799  | 19.064  | 10.900          | 0.000          | 10.900           |

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| Exhibit P-3a, Individual Modification: FY 2             | 2018 Air Force                    |   |                                   |  | <b>Date:</b> May 2017             |                                   |
|---|-----------------------------------|---|-----------------------------------|--|-----------------------------------|-----------------------------------|
| Appropriation / Budget Activity / Budget 3080F / 04 / 6 | Sub Activity:                     | P-1 Line Item Numbe<br>846080 / DCGS-AF | r / Title:                        | Modification Number / Title:<br>4 / DCGS Reference Imagery Transition<br>(DRT) |                                   |                                   |
| ID Code (A=Service Ready, B=Not Service Ready):         |                                   |   | MDAP/MAIS Cod                     | de:  |                                   |                                   |
| Models of Systems Affected: 0305208F                    | Modif                             | fication Type: Reliability              | / & Maintainability               | Related RDT  | <b>&amp;E PEs</b> : 0305208F      |                                   |
|   | Prior Years                       | FY 2016                                 | FY 2018 Base                      | FY 2018 OCO  | FY 2018 Total                     |                                   |
| Financial Plan  | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)       | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M)  | Qty (Each) I<br>Total Cost (\$ M) | Qty (Each) I<br>Total Cost (\$ M) |
| Procurement   |                                   |   |                                   |  | ,                                 |                                   |
| Modification Item 1 of 1: DRT                           |                                   | _                                       |                                   |  | _                                 |                                   |
| B Kits  |                                   |   |                                   |  |                                   |                                   |
| Recurring   |                                   |   |                                   |  |                                   |                                   |
| DRT:EQUIPMENT Group B (Active)                          | - 1 -                             | 0 / 16.040                              | 0 / 17.540                        | 0 / 10.900   | 0 / 0.000                         | 0 / 10.90                         |
| Subtotal: Recurring                                     | - / -                             | - /16.040                               | - /17.540                         | - /10.900  | - /0.000                          | - /10.90                          |
| Subtotal: DRT   | - / -                             | - /16.040                               | - /17.540                         | - /10.900  | - /0.000                          | - /10.90                          |
| Subtotal: Procurement, All Modification Items           | - / -                             | - /16.040                               | - /17.540                         | - /10.900  | - /0.000                          | - /10.90                          |
| Support (All Modification Items)                        |                                   |   |                                   |  |                                   |                                   |
| PMA - Contractor Services                               | - 1 -                             | - /0.759                                | - /1.461                          | - / 0.000  | - /0.000                          | - /0.00                           |
| PMA - Other Gov't Costs                                 | - 1 -                             | - /0.000                                | - /0.063                          | - /0.000   | - /0.000                          | - /0.00                           |
| Subtotal: Support                                       | - / -                             | - /0.759                                | - /1.524                          | - /0.000   | - /0.000                          | - /0.00                           |
| Installation  |                                   |   |                                   |  |                                   |                                   |
| Subtotal: Installation                                  | - / -                             | - / -                                   | - / -                             | - / -  | - / -                             | - / -                             |
| Total   |                                   |   |                                   |  |                                   |                                   |
| Total Cost (Procurement + Support + Installation)       | -                                 | 16.799                                  | 19.064                            | 10.900   | 0.000                             | 10.90                             |

LI 846080 - DCGS-AF Air Force

| Exhibit P-3a, Individual Modification: F)              | 2018 Air Force  |                                       |                                    | Date: May 2017   |
|--|-----------------|---------------------------------------|------------------------------------|--|
| Appropriation / Budget Activity / Budge 3080F / 04 / 6 | t Sub Activity: | P-1 Line Item Num<br>846080 / DCGS-AF |                                    | Modification Number / Title: 4 / DCGS Reference Imagery Transition (DRT) |
| ID Code (A=Service Ready, B=Not Service Ready):        |                 |                                       | MDAP/MAIS Code:                    |  |
| Modification Item 1 of 1: DRT                          |                 |                                       | ·                                  |  |
| Manufacturer Information                               |                 |                                       |                                    |  |
| Manufacturer Name: Various                             |                 |                                       | Manufacturer Location: Various     |  |
| Administrative Leadtime (in Months): 0                 |                 |                                       | Production Leadtime (in Months): 0 |  |
| Dates  | F               | Y 2016                                | FY 2017                            | FY 2018  |
| Contract Dates   |                 |                                       |                                    |  |
| Delivery Dates   |                 |                                       |                                    |  |
| In the Hoteless looks over all to a                    |                 |                                       |                                    |  |
| Installation Information                               |                 |                                       | 1                                  |  |
| Method of Implementation (Organic): Org/Intermed       | diate           |                                       | Installat                          | tion Quantity: 0   |
|  |                 |                                       |                                    |  |
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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 04 / 6

P-1 Line Item Number / Title:

846080 / DCGS-AF

Support to DCGS Enterprise

| 30001 7 04 7 0                         |          |                       |           |               |                         |           |               | <del>+0000 1</del>      | DCC0-7    | VI            |                         |           |               |                         | 0.        | арроп к       | 0000                    | Litterpri | 30            |                         |
|--|----------|-----------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|-----------|---------------|-------------------------|
|  |          |                       | P         | rior Year     | s                       |           | FY 2016       |                         |           | FY 2017       |                         | FY        | ′ 2018 Ba     | se                      | FY        | / 2018 OC     | 0                       | FY        | ' 2018 Tot    | tal                     |
| Item Number /<br>Title [DODIC]         | ID<br>CD | MDAP/<br>MAIS<br>Code | Unit Cost | Qty<br>(Each) | Total<br>Cost<br>(\$ M) |
| Support to DCGS Enterpr                | rise     |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| Imagery Processing                     | Α        |                       | - 1       | -             | -                       | -         | -             | 3.526                   | -         | -             | 3.532                   | -         | -             | 3.611                   | -         | -             | 0.000                   | -         | -             | 3.611                   |
| Secondary Distribution                 |          |                       |           |               |                         |           |               |                         |           |               |                         | •         |               | ,                       |           |               | •                       |           |               |                         |
| AF                                     |          |                       |           | -             | -                       |           | -             | 3.526                   |           | -             | 3.532                   |           | -             | 3.611                   |           | -             | 0.000                   |           | -             | 3.611                   |
| Deployable Surface<br>Terminal         | А        |                       | -         | -             | -                       | -         | -             | 9.356                   | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       | -         | -             | -                       |
| Secondary Distribution                 |          |                       |           |               |                         | ,         |               |                         |           | ,             |                         |           |               |                         |           |               | ,                       |           |               |                         |
| AF                                     |          |                       |           | -             | -                       |           | -             | 9.356                   |           | -             | -                       |           | -             | -                       |           | -             | -                       |           | -             | -                       |
| Extended Tether<br>Program             | Α        |                       | -         | -             | -                       | -         | -             | 9.521                   | -         | -             | 18.635                  | -         | -             | 9.813                   | -         | -             | -                       | -         | -             | 9.813                   |
| Secondary Distribution                 |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                                     |          |                       |           | -             | -                       |           | -             | 9.521                   |           | -             | 18.635                  |           | -             | 9.813                   |           | -             | -                       |           | -             | 9.813                   |
| Wide Area Networks/<br>Networks        | А        |                       | -         | -             | -                       | -         | -             | 9.416                   | -         | -             | 7.700                   | -         | -             | 7.869                   | -         | -             | -                       | -         | -             | 7.869                   |
| Secondary Distribution                 |          |                       |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |           |               |                         |
| AF                                     |          |                       |           | -             | -                       |           | -             | 9.416                   |           | -             | 7.700                   |           | -             | 7.869                   |           | -             | -                       |           | -             | 7.869                   |
| Subtotal: Support to DCG<br>Enterprise | s        |                       | -         | -             | -                       | -         | -             | 31.819                  | -         | -             | 29.867                  | -         | -             | 21.293                  | -         | -             | 0.000                   | -         | -             | 21.293                  |
| Total                                  |          |                       | -         | -             | -                       | -         | -             | 31.819                  | -         | -             | 29.867                  | -         | -             | 21.293                  | -         | -             | 0.000                   | -         | -             | 21.293                  |

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

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P-1 Line #59



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

846510 / Special Update Program

Support Equip / BSA 6: Special Support Projects

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

|   | Prior        |                  |                    | FY 2018          | FY 2018         | FY 2018          |                 |               |         |         | То       |           |
|---|--------------|------------------|--------------------|------------------|-----------------|------------------|-----------------|---------------|---------|---------|----------|-----------|
| Resource Summary                              | Years        | FY 2016          | FY 2017            | Base             | oco             | Total            | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total     |
| Procurement Quantity (Units in Each)          | -            | -                | -                  | -                | -               | -                | -               | -             | -       | -       | -        | -         |
| Gross/Weapon System Cost (\$ in Millions)     | -            | 629.371          | 577.710            | 840.980          | 0.000           | 840.980          | 713.612         | 653.158       | 687.218 | 669.865 | -        | 4,771.914 |
| Less PY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -               | -                | -               | -             | -       | -       | -        | -         |
| Net Procurement (P-1) (\$ in Millions)        | -            | 629.371          | 577.710            | 840.980          | 0.000           | 840.980          | 713.612         | 653.158       | 687.218 | 669.865 | -        | 4,771.914 |
| Plus CY Advance Procurement (\$ in Millions)  | -            | -                | -                  | -                | -               | -                | -               | -             | -       | -       | -        | -         |
| Total Obligation Authority (\$ in Millions)   | -            | 629.371          | 577.710            | 840.980          | 0.000           | 840.980          | 713.612         | 653.158       | 687.218 | 669.865 | -        | 4,771.914 |
| (The following                                | Resource Sum | mary rows are fo | or informational p | urposes only. Th | e corresponding | n budget request | s are documente | d elsewhere.) |         |         |          |           |
| Initial Spares (\$ in Millions)               | -            | -                | -                  | -                | -               | -                | -               | -             | -       | -       | -        | -         |
| Flyaway Unit Cost (\$ in Dollars)             | -            | -                | -                  | -                | -               | -                | -               | -             | -       | -       | -        | -         |
| Gross/Weapon System Unit Cost (\$ in Dollars) | -            | -                | -                  | -                | -               | -                | -               | -             | -       | -       | -        | -         |

# **Description:**

This program is reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

#### Justification:

This program is reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

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P-1 Line #61



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

846570 / Defense Space Reconnaissance Prog.

Support Equip / BSA 6: Special Support Projects

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

|  | Prior          |                  |                    | FY 2018          | FY 2018          | FY 2018          |                 |                |         |         | То       |         |
|--|----------------|------------------|--------------------|------------------|------------------|------------------|-----------------|----------------|---------|---------|----------|---------|
| Resource Summary                               | Years          | FY 2016          | FY 2017            | Base             | oco              | Total            | FY 2019         | FY 2020        | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -              | 128.724          | 0.000              | 0.000            | 0.000            | 0.000            | 0.000           | 0.000          | 0.000   | 0.000   | -        | 128.724 |
| Less PY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -              | 128.724          | 0.000              | 0.000            | 0.000            | 0.000            | 0.000           | 0.000          | 0.000   | 0.000   | -        | 128.724 |
| Plus CY Advance Procurement (\$ in Millions)   | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -              | 128.724          | 0.000              | 0.000            | 0.000            | 0.000            | 0.000           | 0.000          | 0.000   | 0.000   | -        | 128.724 |
| (The following                                 | g Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | g budget request | s are documente | ed elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -              | -                | -                  | -                | -                | -                | -               | -              | -       | -       | -        | -       |

# **Description:**

Detailed information on DSRP remains classified and will be provided on a need-to-know basis.

#### Justification:

Detailed information on DSRP remains classified and will be provided on a need-to-know basis.



Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 05: Spares and Repair Parts / BSA 1:

861900 / Spares and Repair Parts

Spares And Repair Parts

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

| Ellic Relli MDAI /MAIO GGGC: 14//              |              |                  |                    |                  |                  |                |                 |               |         |         |          |         |
|--|--------------|------------------|--------------------|------------------|------------------|----------------|-----------------|---------------|---------|---------|----------|---------|
|  | Prior        |                  |                    | FY 2018          | FY 2018          | FY 2018        |                 |               |         |         | То       |         |
| Resource Summary                               | Years        | FY 2016          | FY 2017            | Base             | oco              | Total          | FY 2019         | FY 2020       | FY 2021 | FY 2022 | Complete | Total   |
| Procurement Quantity (Units in Each)           | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Cost (\$ in Millions)      | -            | 59.863           | 16.600             | 26.675           | 0.000            | 26.675         | 11.640          | 10.862        | 14.210  | 13.705  | 0.000    | 153.555 |
| Less PY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Net Procurement (P-1) (\$ in Millions)         | -            | 59.863           | 16.600             | 26.675           | 0.000            | 26.675         | 11.640          | 10.862        | 14.210  | 13.705  | 0.000    | 153.555 |
| Plus CY Advance Procurement (\$ in Millions)   | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Total Obligation Authority (\$ in Millions)    | -            | 59.863           | 16.600             | 26.675           | 0.000            | 26.675         | 11.640          | 10.862        | 14.210  | 13.705  | 0.000    | 153.555 |
| (The following                                 | Resource Sum | mary rows are fo | or informational p | urposes only. Th | ne corresponding | budget request | s are documente | d elsewhere.) |         |         |          |         |
| Initial Spares (\$ in Millions)                | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Flyaway Unit Cost (\$ in Millions)             | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |
| Gross/Weapon System Unit Cost (\$ in Millions) | -            | -                | -                  | -                | -                | -              | -               | -             | -       | -       | -        | -       |

# **Description:**

Initial Spares consist of reparable components, assemblies, subassemblies, and consumable items required as initial stock (including readiness spares package requirements) in support of newly fielded vehicles, communications electronics and telecommunications equipment, and other base maintenance and support equipment items. Requirements are determined by applying established factors against the acquisition cost of the end items. The factors are based on historical data of similar equipment, employment/deployment concepts, production schedules, and other related information.

The funding for the following programs was transferred to the Space Procurement, Air Force appropriation beginning in FY17:

Family of Advanced BLoS Terminals (FAB-T)

Information Systems Security Program

NAVSTAR Global Positioning System (Space and Control Segments)

Space Situation Awareness Operations

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3080F: Other Procurement, Air Force / BA 05: Spares and Repair Parts / BSA 1:

861900 / Spares and Repair Parts

Spares And Repair Parts

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

|                 | Exhibits Schedule              |             |          |                       | Prior Years                              | FY 2016                                  | FY 2017                                  | FY 2018 Base                             | FY 2018 OCO                              | FY 2018 Total                            |
|-----------------|--------------------------------|-------------|----------|-----------------------|--|--|--|--|--|--|
| Exhibit<br>Type | Title*                         | Subexhibits | ID<br>CD | MDAP/<br>MAIS<br>Code | Quantity / Total Cost<br>(Each) / (\$ M) |
| P-18            | Spares and Repair Parts        |             |          | 199                   | - / -                                    | - / 59.863                               | - / 16.600                               | - / 26.675                               | - / 0.000                                | - / 26.675                               |
| P-40            | Total Gross/Weapon System Cost |             |          |                       | - 1 -                                    | - / 59.863                               | - / 16.600                               | - / 26.675                               | - / 0.000                                | - / 26.675                               |

Title represents the P-18 Title for Spares.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

In FY2018 initial spares and repair parts will be procured for the following programs Air Traffic Control, Approach, and Landing System (ATCALS; Combat Training Range Equipment; Expeditionary Airfield Basing Assets; Information Systems Security Program; National Airspace System (NAS)Plan; and Weather Observation/Forecast.

LI 861900 - Spares and Repair Parts Air Force

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P-1 Line #64-65

Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification: FY 2018 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3080F / 05 / 1

P-1 Line Item Number / Title:
861900 / Spares and Repair Parts

Spares and Repair Parts

| 3080F / 05 / 1  | 861900 / Sp           | ares and Repair Pai | rts    | Spar                   | Spares and Repair Parts |                      |  |  |
|---|-----------------------|---------------------|--------|------------------------|-------------------------|----------------------|--|--|
| End Item Line Item Number / Name [MDAP/MAIS]                            | Prior Years<br>(\$ M) |                     |        | FY 2018 Base<br>(\$ M) | FY 2018 OCO<br>(\$ M)   | FY 2018 Total (\$ M) |  |  |
| Initial   |                       | ,                   |        | ,                      | ,                       |                      |  |  |
| BA 05 - Spares and Repair Parts   |                       |                     |        |                        |                         |                      |  |  |
| 861900 / Air Traffic Control, Approach, and Landing System (ATCALS)     | -                     | 2.775               | 4.964  | 4.751                  | 0.000                   | 4.75                 |  |  |
| 861900 / C-17 AIRCRAFT (IF)   | -                     | 1.100               | 0.000  | 0.000                  | 0.000                   | 0.00                 |  |  |
| 861900 / Combat Training Range Equipment                                | -                     | 0.101               | 5.930  | 16.188                 | 0.000                   | 16.18                |  |  |
| 861900 / Expeditionary Airfield Basing Assets                           | -                     | 1.807               | 2.842  | 1.960                  | 0.000                   | 1.96                 |  |  |
| 861900 / Family of Advanced BLoS Terminals (FAB-T)                      | -                     | 44.436              | 0.000  | 0.000                  | 0.000                   | 0.00                 |  |  |
| 861900 / Information Systems Security Program                           | -                     | 1.987               | 1.687  | 2.588                  | 0.000                   | 2.58                 |  |  |
| 861900 / MILSATCOM Terminals [199]                                      | -                     | 0.054               | 0.000  | 0.000                  | 0.000                   | 0.00                 |  |  |
| 861900 / National Airspace System (NAS) Plan                            | -                     | 0.000               | 0.000  | 0.247                  | 0.000                   | 0.24                 |  |  |
| 861900 / NAVSTAR Global Positioning System (Space and Control Segments) | -                     | 0.533               | 0.000  | 0.000                  | 0.000                   | 0.00                 |  |  |
| 861900 / NCMC - TW/AA System  | -                     | 0.877               | 0.458  | 0.000                  | 0.000                   | 0.00                 |  |  |
| 861900 / Space Situation Awareness Operations                           | -                     | 4.868               | 0.000  | 0.000                  | 0.000                   | 0.00                 |  |  |
| 861900 / Weather Observation/Forecast                                   | -                     | 0.278               | 0.719  | 0.941                  | 0.000                   | 0.94                 |  |  |
| 861900 / Worldwide Joint Strategic Communications                       | -                     | 1.047               | 0.000  | 0.000                  | 0.000                   | 0.00                 |  |  |
| Subtotal: Initial   | -                     | 59.863              | 16.600 | 26.675                 | 0.000                   | 26.67                |  |  |
| Total Cost (Initial + Replenishment)                                    | -                     | 59.863              | 16.600 | 26.675                 | 0.000                   | 26.67                |  |  |

