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**Department of Defense
Fiscal Year (FY) 2017 President's Budget Submission**

February 2016



Air Force

Justification Book Volume 1 of 1

Other Procurement, Air Force

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Air Force • President's Budget Submission FY 2017 • Procurement

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Appropriation Language
Fiscal Year (FY) 2017 President's Budget
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, \$2,542,538,000 to remain available for obligation until September 30, 2019.

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Department of the Air Force
 FY 2017 President's Budget
 Exhibit P-1 FY 2017 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

27 Jan 2016

Appropriation: Other Procurement, Air Force

Budget Activity -----	FY 2015 (Base & OCO) -----	FY 2016 Base Enacted -----	FY 2016 OCO Enacted -----	FY 2016 Total Enacted -----
02. Vehicular Equipment	163,020	218,302		218,302
03. Electronics and Telecommunications Equip	1,474,828	1,327,444	35,418	1,362,862
04. Other Base Maintenance and Support Equip	18,755,395	16,704,854	3,441,583	20,146,437
05. Spares and Repair Parts	32,813	59,863		59,863
Total Other Procurement, Air Force	20,426,056	18,310,463	3,477,001	21,787,464

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Department of the Air Force
FY 2017 President's Budget
Exhibit P-1 FY 2017 President's Budget
Total Obligational Authority
(Dollars in Thousands)

27 Jan 2016

Appropriation: Other Procurement, Air Force

Budget Activity -----	FY 2017 Base -----	FY 2017 OCO -----	FY 2017 Total -----
02. Vehicular Equipment	141,151	106,817	247,968
03. Electronics and Telecommunications Equip	1,285,033	62,670	1,347,703
04. Other Base Maintenance and Support Equip	15,996,088	3,526,794	19,522,882
05. Spares and Repair Parts	15,784		15,784
Total Other Procurement, Air Force	17,438,056	3,696,281	21,134,337

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Department of the Air Force
 FY 2017 President's Budget
 Exhibit P-1 FY 2017 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

27 Jan 2016

Appropriation: 3080F Other Procurement, Air Force

Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO) Quantity Cost	FY 2016 Base Enacted Quantity Cost	FY 2016 OCO Enacted Quantity Cost	FY 2016 Total Enacted Quantity Cost	S e c
Budget Activity 02: Vehicular Equipment							
Passenger Carrying Vehicles							
1	Passenger Carrying Vehicles	A	6,528	8,834		8,834	U
Cargo and Utility Vehicles							
2	Medium Tactical Vehicle	A	7,639	58,160		58,160	U
3	Cap Vehicles	A	1,700	1,700		1,700	U
4	Items Less Than \$5 Million	A	27,778	12,483		12,483	U
Special Purpose Vehicles							
5	Security And Tactical Vehicles	A	10,027	4,728		4,728	U
6	Items Less Than \$5 Million	A	9,781	4,662		4,662	U
Fire Fighting Equipment							
7	Fire Fighting/Crash Rescue Vehicles	A	10,152	10,419		10,419	U
Materials Handling Equipment							
8	Items Less Than \$5 Million	A	20,239	23,320		23,320	U
Base Maintenance Support							
9	Runway Snow Remov & Cleaning Equip	A	11,946	6,215		6,215	U
10	Items Less Than \$5 Million	A	57,069	87,781		87,781	U
Cancelled Account Adjustments							

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11 Cancelled Account Adjustments	A	161			U
		-----	-----	-----	
Total Vehicular Equipment		163,020	218,302		218,302

P-1C1: FY 2017 President's Budget (Published Version of PB Position), as of January 27, 2016 at 10:18:54

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 (Dollars in Thousands)

27 Jan 2016

Appropriation: 3080F Other Procurement, Air Force

Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 02: Vehicular Equipment									

Passenger Carrying Vehicles									
1	Passenger Carrying Vehicles	A		14,437		2,003		16,440	U
Cargo and Utility Vehicles									
2	Medium Tactical Vehicle	A		24,812		9,066		33,878	U
3	Cap Vehicles	A		984				984	U
4	Items Less Than \$5 Million	A		11,191		12,264		23,455	U
Special Purpose Vehicles									
5	Security And Tactical Vehicles	A		5,361				5,361	U
6	Items Less Than \$5 Million	A		4,623		16,789		21,412	U
Fire Fighting Equipment									
7	Fire Fighting/Crash Rescue Vehicles	A		12,451		48,590		61,041	U
Materials Handling Equipment									
8	Items Less Than \$5 Million	A		18,114		2,366		20,480	U
Base Maintenance Support									
9	Runway Snow Remov & Cleaning Equip	A		2,310		6,468		8,778	U
10	Items Less Than \$5 Million	A		46,868		9,271		56,139	U
Cancelled Account Adjustments									

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11 Cancelled Account Adjustments	A	-----	-----	-----	U
Total Vehicular Equipment		141,151	106,817	247,968	

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Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO)		FY 2016 Base Enacted		FY 2016 OCO Enacted		FY 2016 Total Enacted		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 03: Electronics and Telecommunications Equip											

Comm Security Equipment(Comsec)											
12	Comsec Equipment	A		91,987		139,244				139,244	U
13	Modifications (COMSEC)	A		1,363		677				677	U
Intelligence Programs											
14	Intelligence Training Equipment	A		2,832		4,041				4,041	U
15	Intelligence Comm Equipment	A		32,329		22,573				22,573	U
Electronics Programs											
16	Air Traffic Control & Landing Sys	A		23,912		28,823				28,823	U
17	National Airspace System	A		6,291		5,833				5,833	U
18	Battle Control System - Fixed	A		2,704		1,682				1,682	U
19	Theater Air Control Sys Improvements	A		50,033		22,710				22,710	U
20	Weather Observation Forecast	A		16,309		21,511				21,511	U
21	Strategic Command And Control	A		146,759		286,980				286,980	U
22	Cheyenne Mountain Complex	A		35,301		36,186				36,186	U
23	Mission Planning Systems	A		15,649		14,456				14,456	U
24	Drug Interdiction Spt	A		20,405							U
25	Integrated Strat Plan & Analy Network (ISPAN)	A		9,060		9,597				9,597	U

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Spcl Comm-Electronics Projects

26 General Information Technology	A	40,030	25,753	3,953	29,706	U
27 AF Global Command & Control Sys	A	9,098	7,212		7,212	U

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27 Jan 2016

Appropriation: 3080F Other Procurement, Air Force

Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 03: Electronics and Telecommunications Equip									

Comm Security Equipment(Comsec)									
12	Comsec Equipment	A		72,359				72,359	U
13	Modifications (COMSEC)	A							U
Intelligence Programs									
14	Intelligence Training Equipment	A		6,982				6,982	U
15	Intelligence Comm Equipment	A		30,504				30,504	U
Electronics Programs									
16	Air Traffic Control & Landing Sys	A		55,803		42,650		98,453	U
17	National Airspace System	A		2,673				2,673	U
18	Battle Control System - Fixed	A		5,677				5,677	U
19	Theater Air Control Sys Improvements	A		1,163				1,163	U
20	Weather Observation Forecast	A		21,667				21,667	U
21	Strategic Command And Control	A		39,803				39,803	U
22	Cheyenne Mountain Complex	A		24,618				24,618	U
23	Mission Planning Systems	A		15,868				15,868	U
24	Drug Interdiction Spt	A							U
25	Integrated Strat Plan & Analy Network (ISPAN)	A		9,331				9,331	U

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Spcl Comm-Electronics Projects

26 General Information Technology	A	41,779	41,779 U
27 AF Global Command & Control Sys	A	15,729	15,729 U

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Appropriation: 3080F Other Procurement, Air Force

Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO)		FY 2016 Base Enacted		FY 2016 OCO Enacted		FY 2016 Total Enacted		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
28	Mobility Command and Control	A		11,462		11,062		2,000		13,062	U
29	Air Force Physical Security System	A		39,925		103,269				103,269	U
30	Combat Training Ranges	A		59,634		33,606				33,606	U
31	Minimum Essential Emergency Comm N	A		1,457		5,232				5,232	U
32	Wide Area Surveillance (WAS)										U
33	C3 Countermeasures	A		12,408		7,453				7,453	U
34	GCSS-AF Fos	A		3,670		15,015				15,015	U
35	Defense Enterprise Accounting and Mgmt System	A		4,298		4,755				4,755	U
36	Theater Battle Mgt C2 System	A		9,493		7,473				7,473	U
37	Air & Space Operations Ctr-WPN SYS	A		25,701		9,993				9,993	U
38	Air Operations Center (AOC) 10.2					14,846				14,846	U
Air Force Communications											
39	Information Transport Systems	A		106,936		74,621				74,621	U
40	AFNET	A		90,487		98,518				98,518	U
41	Joint Communications Support Element (JCSE)	A				5,199				5,199	U
42	USCENTCOM	A		16,342		15,780		10,000		25,780	U
Space Programs											
43	Family of Beyond Line-of-Sight Terminals	A		52,278							U
44	Space Based Ir Sensor Pgm Space	A		31,293							U

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45 Navstar GPS Space	A	2,065	U
46 Nudet Detection Sys Space	A	4,656	U

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 (Dollars in Thousands)

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Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
28	Mobility Command and Control	A		9,814			9,814		U
29	Air Force Physical Security System	A		99,460		7,500	106,960		U
30	Combat Training Ranges	A		34,850			34,850		U
31	Minimum Essential Emergency Comm N	A		198,925			198,925		U
32	Wide Area Surveillance (WAS)			6,943			6,943		U
33	C3 Countermeasures	A		19,580		620	20,200		U
34	GCSS-AF Fos	A		1,743			1,743		U
35	Defense Enterprise Accounting and Mgmt System	A							U
36	Theater Battle Mgt C2 System	A		9,659			9,659		U
37	Air & Space Operations Ctr-WPN SYS	A		15,474			15,474		U
38	Air Operations Center (AOC) 10.2			30,623			30,623		U
Air Force Communications									
39	Information Transport Systems	A		40,043			40,043		U
40	AFNET	A		146,897			146,897		U
41	Joint Communications Support Element (JCSE)	A		5,182			5,182		U
42	USCENTCOM	A		13,418			13,418		U
Space Programs									
43	Family of Beyond Line-of-Sight Terminals	A							U
44	Space Based Ir Sensor Pgm Space	A							U

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45 Navstar GPS Space

A

U

46 Nudet Detection Sys Space

A

U

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 (Dollars in Thousands)

27 Jan 2016

Appropriation: 3080F Other Procurement, Air Force

Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO)		FY 2016 Base Enacted		FY 2016 OCO Enacted		FY 2016 Total Enacted		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
47	AF Satellite Control Network Space	A		54,436							U
48	Spacelift Range System Space	A		62,525							U
49	Milsatcom Space	A		65,002							U
50	Space Mods Space	A		31,706							U
51	Counterspace System	A		59,439							U
Organization and Base											
52	Tactical C-E Equipment	A		50,487	133,140		4,065		137,205		U
53	Radio Equipment	A		14,846	8,400				8,400		U
54	CCTV/Audiovisual Equipment	A		3,635	6,144				6,144		U
55	Base Comm Infrastructure	A		95,759	67,010		15,400		82,410		U
Modifications											
56	Comm Elect Mods	A		60,826	78,650				78,650		U
Total Electronics and Telecommunications Equip				1,474,828	1,327,444		35,418		1,362,862		
Budget Activity 04: Other Base Maintenance and Support Equip											
Personal Safety & Rescue Equip											
57	Night Vision Goggles	A		13,342	2,370		3,580		5,950		U
58	Items Less Than \$5 Million	A		31,209	69,623		3,407		73,030		U
Depot Plant+Mtrls Handling Eq											

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59 Mechanized Material Handling Equip	A	7,670	7,249	7,249 U
Base Support Equipment				
60 Base Procured Equipment	A	16,155	13,595	13,595 U

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Department of the Air Force
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 (Dollars in Thousands)

27 Jan 2016

Appropriation: 3080F Other Procurement, Air Force

Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
47	AF Satellite Control Network Space	A							U
48	Spacelift Range System Space	A							U
49	Milsatcom Space	A							U
50	Space Mods Space	A							U
51	Counterspace System	A							U
Organization and Base									
52	Tactical C-E Equipment	A		109,836		8,100		117,936	U
53	Radio Equipment	A		16,266				16,266	U
54	CCTV/Audiovisual Equipment	A		7,449				7,449	U
55	Base Comm Infrastructure	A		109,215				109,215	U
Modifications									
56	Comm Elect Mods	A		65,700		3,800		69,500	U
Total Electronics and Telecommunications Equip				1,285,033		62,670		1,347,703	
Budget Activity 04: Other Base Maintenance and Support Equip									

Personal Safety & Rescue Equip									
57	Night Vision Goggles	A							U
58	Items Less Than \$5 Million	A		54,416				54,416	U
Depot Plant+Mtrls Handling Eq									

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59 Mechanized Material Handling Equip	A	7,344	7,344 U
Base Support Equipment			
60 Base Procured Equipment	A	6,852	6,852 U

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Department of the Air Force
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27 Jan 2016

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Line No	Item Nomenclature	Ident Code	FY 2015 (Base & OCO)		FY 2016 Base Enacted		FY 2016 OCO Enacted		FY 2016 Total Enacted		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
61	Engineering and EOD Equipment	A		118,734		17,866		46,790		64,656	U
62	Productivity Capital Investment	A		2,495							U
63	Mobility Equipment	A		64,934		61,850		400		62,250	U
64	Items Less Than \$5 Million	A		20,147		20,477		9,800		30,277	U
Special Support Projects											
66	DARP RC135	A		24,710		25,072				25,072	U
67	DCGS-AF	A		206,743		177,021				177,021	U
69	Special Update Program	A		537,370		629,371				629,371	U
70	Defense Space Reconnaissance Prog.	A		83,998		100,654		28,070		128,724	U
999	Classified Programs			17,627,888		15,579,706		3,349,536		18,929,242	U
Total Other Base Maintenance and Support Equip				18,755,395		16,704,854		3,441,583		20,146,437	
Budget Activity 05: Spares and Repair Parts											

Spares and Repair Parts											
72	Spares and Repair Parts	A									U
73	Spares And Repair Parts	A		32,813		59,863				59,863	U
Total Spares and Repair Parts				32,813		59,863				59,863	
Total Other Procurement, Air Force				20,426,056		18,310,463		3,477,001		21,787,464	

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Department of the Air Force
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27 Jan 2016

Appropriation: 3080F Other Procurement, Air Force

Line No	Item Nomenclature	Ident Code	FY 2017 Base		FY 2017 OCO		FY 2017 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
61	Engineering and EOD Equipment	A				53,900		53,900	U
62	Productivity Capital Investment	A							U
63	Mobility Equipment	A		8,146				8,146	U
64	Items Less Than \$5 Million	A		28,427				28,427	U
Special Support Projects									
66	DARP RC135	A		25,287				25,287	U
67	DCGS-AF	A		169,201		800		170,001	U
69	Special Update Program	A		576,710				576,710	U
70	Defense Space Reconnaissance Prog.	A							U
999	Classified Programs			15,119,705		3,472,094		18,591,799	U
Total Other Base Maintenance and Support Equip				15,996,088		3,526,794		19,522,882	
Budget Activity 05: Spares and Repair Parts									

Spares and Repair Parts									
72	Spares and Repair Parts	A		15,784				15,784	U
73	Spares And Repair Parts	A							U
Total Spares and Repair Parts				15,784				15,784	
Total Other Procurement, Air Force				17,438,056		3,696,281		21,134,337	

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Exhibit P-1M, Procurement Programs - Modification Summary
(Listing by Model)

Lookup Matrix by Model

Model:	E-3		
Modification P-40a Aggregated Items Title:	C2ISR Tactical Data Link		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
C2ISR1	C2ISR Tactical Data Link	Yes	

Model:	E-8C		
Modification P-40a Aggregated Items Title:	C2ISR Tactical Data Link		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
C2ISR1	C2ISR Tactical Data Link	Yes	

Model:	RC-135		
Modification P-40a Aggregated Items Title:	C2ISR Tactical Data Link		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
C2ISR1	C2ISR Tactical Data Link	Yes	

Model:	AOC		
Modification P-40a Aggregated Items Title:	C2ISR Tactical Data Link		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
C2ISR1	C2ISR Tactical Data Link	Yes	

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

Model:	NA		
Modification P-40a Aggregated Items Title:	Network-Centric Collaborative Targeting		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
NCCT1	Replacement of Ground Stations	No	
Modification P-40a Aggregated Items Title:	Submarine-Launched Ballistic Missile (SLBM) Radar Warning System		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			

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Model:	NA	
Modification P-40a Aggregated Items Title:	Submarine-Launched Ballistic Missile (SLBM) Radar Warning System	
Item Number	Item Title	Applies to Multiple Models
P-3A PAVE PAWS Modifications	P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)	No
Modification P-40a Aggregated Items Title:	Ballistic Missile Early Warning System (BMEWS)	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
COBRA DANE Radar Mod	COBRA DANE Radar Mod	No
P-3A BMEWS Modification	BMEWS Modification	No
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	Mod HEMP	No
1	PAVE PAWS Block 00 Update	No
3	P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)	No

Model:	BCS-ModernizationUpgrades	
Modification P-40a Aggregated Items Title:	BCSMU	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
BCSMU-1	BCS MOD UPGRADES	No

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Model:	TACSI1	
Modification P-40a Aggregated Items Title:	Control and Reporting Center (CRC)	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
TACSI1	THEATER AIR CONTROL SYSTEM IMPROVEMENT MOD	No

Model:	NWM	
Modification P-40a Aggregated Items Title:	WOF	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
WOF2	NWM	No

Model:	WDA	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	WDA	No

Model:	CheyenneMountainComplex	
Modification P-40a Aggregated Items Title:	COCOM Mobile Command and Control Centers (MCCCs)	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
002	Mobile Consolidated Command Center Modification	No
Modification P-40a Aggregated Items Title:	NCMC - TW/AA System	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		

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Model:	CheyenneMountainComplex	
Modification P-40a Aggregated Items Title:	NMC - TW/AA System	
Item Number	Item Title	Applies to Multiple Models
001	Core C2 Enterprise Network Infrastructure and Mission Equipment	No
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
001	Mobile Consolidated Command Center Upgrade Block 00	No

Model:	NORADCheyenneMountainComplex	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
002	NORAD Cheyenne Mountain Complex Block 00	No

Model:	Bases	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	Base Physical Security Systems	No

Model:	Joint Threat Emitter	
Modification P-40a Aggregated Items Title:	Combat Training Range Equipment	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
CTR01	Combat Training Ranges Joint Threat Emitter	No

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Model:	Combat Training Range		
Modification P-40a Aggregated Items Title:	Combat Training Range Equipment		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
CTR02	Combat Training Ranges UMTE	No	
CTR03	Mini-Mute Mod (GEAR)	No	

Model:	PRC2		
Modification P-40a Aggregated Items Title:	TBMC2 Mods		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
PRC2	PRC2	No	

Model:	UC2		
Modification P-40a Aggregated Items Title:	TBMC2 Mods		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
UC2	UC2	No	

Model:	BITI		
Modification P-40a Aggregated Items Title:	AIR FORCE COMMUNICATIONS (AIRCOM)		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
BITI Modification 1	BITI Mod/Recaps	No	

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Model:	ACD-AFINC-CSCS	
Modification P-40a Aggregated 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 Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	ACD WS 0208088F	No

Model:	AFINC-CSCS-WS	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	AFINC/CSCS WS 0303089	No

Model:	AFNET	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	AFNET	No

Model:	Air Force Satellite Control Network	
Modification P-40a Aggregated Items Title:	AIR FORCE SATELLITE CONTROL NETWORK SPACE MODS	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		

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Model:	Air Force Satellite Control Network		
Modification P-40a Aggregated Items Title:	AIR FORCE SATELLITE CONTROL NETWORK SPACE MODS		
Item Number	Item Title	Applies to Multiple Models	
01-RBC	Remote Tracking Station Block Change (RBC)	No	
02-AFSCN	Air Force Satellite Control Network Recapitalization Projects	No	

Model:	Spacelift Range System Space		
Modification P-40a Aggregated Items Title:	Spacelift Range System Space		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
01-MEN	Modernization of Eastern Range Network (MEN)	No	
02-WMN	Western Range Modernization of Network (WMN)	No	
03-RCDM	Range Command Destruct Modernization (RCDM)	No	
04-SLRS	Spacelift Range System Recapitalization Projects	No	

Model:	GPS-OCS		
Modification P-40a Aggregated Items Title:	NAVSTAR Global Positioning System (Space and Control Segments)		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
NAVSTAR GPS-OCS COTS UPGRADE	NAVSTAR GPS-OCS COTS UPGRADE	No	

Model:	GEODSS		
Modification P-40a Aggregated Items Title:	Space Situation Awareness Operations		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			

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Model:	GEODSS		
Modification P-40a Aggregated Items Title:	Space Situation Awareness Operations		
Item Number	Item Title	Applies to Multiple Models	
P-3A GEODSS	P-3A GEODSS	No	

Model:	AN/FPS-117		
Modification P-40a Aggregated Items Title:	Atmospheric Early Warning System		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
SC3I AEWS - FPS-117 EPRP	SC3I AEWS - FPS-117 EPRP	No	

Model:	WSR-88D		
Modification P-40a Aggregated Items Title:	Weather Service		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
00-001	Next Generation Radar (NEXRAD) WSR-88D Upgrades	No	
13-009	WSR-88D Next Generation Radar (NEXRAD) Service Life Extension	No	
14-001	Next Generation Radar (NEXRAD) WSR-88D IT Refresh	No	

Model:	Weather Data Analysis		
Modification P-40a Aggregated Items Title:	Weather Service		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
07-001	Numerical Weather Modeling	No	

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Model:	Weather Data Analysis	
Modification P-40a Aggregated Items Title:	Weather Service	
Item Number	Item Title	Applies to Multiple Models
98-001	Weather Data Analysis	No

Model:	AN/FMQ-7	
Modification P-40a Aggregated Items Title:	Weather Service	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
08-001	AN/FMQ-7 Solar Optical Observing Network (SOON)	No

Model:	AN/UMQ-13	
Modification P-40a Aggregated Items Title:	Weather Service	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
09-001	AN/UMQ-13 MARK IV-B	No

Model:	AN/TMQ-53	
Modification P-40a Aggregated Items Title:	Weather Service	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
11-003	AN/TMQ-53 Tactical Meteorological Observing System (TMOS)	No

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Model:	RSTN		
Modification P-40a Aggregated Items Title:	Weather Service		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
14-007	Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP)	Yes	

Model:	AN/FRR-95 (RIMS) & A/F24U-1 (SRS)		
Modification P-40a Aggregated Items Title:	Weather Service		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
14-007	Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP)	Yes	

Model:	AN/FMQ-23		
Modification P-40a Aggregated Items Title:	Weather Service		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
16-002	AN/FMQ-23 Refresh	No	

Model:	Weather Service		
Modification P-40a Aggregated Items Title:	Weather Service		
Item Number	Item Title	Applies to Multiple Models	
Uncategorized			
P-3A Low Cost Modifications	P-3A Low Cost Modifications	No	

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(Listing by Model)

Model:	Joint Environmental Tool Kit	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	Joint Environmental Toolkit (JET) Refresh	No

Model:	ATCALs	
Modification P-40a Aggregated 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:	GRN-29	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	ATCALs AN/GRN-29 Instrument Landing System (PE 0305114F)	No

Model:	TRN-48	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
2	Deployable TACAN Retrofit/Refurbishment	No

Model:	NASMod-1	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	National Airspace System (NAS) Mod 1	No

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(Listing by Model)

Model:	Raytheon	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
2	BMEWS DP/SP Suite Replacement	No

Model:	Exelis	
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
2	P-3A PARCS Modification (formerly PARCS PARSS)	No
4	PARCS Block 00 Update	No

Model:	0305208F	
Modification P-40a Aggregated Items Title:	0305208F	
Item Number	Item Title	Applies to Multiple Models
Uncategorized		
DCGS10	Network Communications	No
DCGS11	Data Links	No
DCGS12	Geospatial Intelligence	No
DCGS5	Sensor Integration-1	No
DCGS6	System Release (SR) 3.0	No
DCGS9	System Release - 1	No
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
1	Geospatial Intelligence Bulk Release (GB) 4.1	No
3	Network Infrastructure Transformation-1	No

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(Listing by Model)

Model: 0305208F		
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
4	Multi-Intelligence-1 (Multi-INT)	No
6	DCGS Reference Imagery Transition (DRT)	No

Model: DCGS		
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
2	Geoint Transformation-1 (GEOINT)	No

Model: No text provided.		
P-3a Individual Modifications		
Modification Number	Modification Title	Applies to Multiple Models
5	Signal Intelligence Transformation-1 (SIGINT)	No

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Exhibit P-1M, Procurement Programs - Modification Summary
(Funding for Modifications)

Funding (\$ M)

Modification P-40a Item Title P-3a Modification Title	PYS	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Exhibit P-40a										
C2ISR Tactical Data Link	-	-	2.246	-	-	-	-	-	-	-
Mod 1 IBS	2.616	2.642	1.548	3.741	-	3.741	3.354	2.500	2.573	2.622
Mod 2	3.108	3.167	3.167	3.167	-	3.167	3.133	3.167	3.262	3.324
Mod 3	1.274	1.298	0.816	1.298	-	1.298	1.300	1.298	1.337	1.362
Mod 4	2.063	2.102	2.102	2.370	-	2.370	2.276	2.102	2.165	2.206
Mod 5	1.060	1.873	1.873	1.873	-	1.873	1.873	1.873	1.929	1.966
JWICS	-	3.920	2.900	4.520	0.000	4.520	4.390	4.070	4.140	4.210
Replacement of Ground Stations	-	2.970	2.420	2.580	0.000	2.580	3.280	3.090	3.140	3.200
BCS MOD UPGRADES	-	1.202	1.582	3.279	-	3.279	0.500	-	-	-
THEATER AIR CONTROL SYSTEM IMPROVEMENT MOD	-	35.230	18.471	0.850	-	0.850	-	-	-	-
NWM	-	1.302	4.583	4.228	-	4.228	4.046	4.234	4.310	4.353
Mobile Consolidated Command Center Modification	-	20.751	9.485	0.573	-	0.573	7.188	7.908	8.047	8.192
Core C2 Enterprise Network Infrastructure and Mission Equipment	-	14.550	26.701	0.750	-	0.750	22.609	22.972	21.841	22.233
Combat Training Ranges Joint Threat Emitter	-	2.000	3.651	-	-	-	3.184	3.326	-	-
Combat Training Ranges UMTE	-	-	7.000	3.900	-	3.900	-	-	-	-
Mini-Mute Mod (CEAR)	-	-	-	-	-	-	5.300	7.000	-	-
PRC2	-	0.995	1.255	1.252	0.000	1.252	1.274	1.297	1.320	1.344
UC2	-	3.825	3.079	3.293	0.000	3.293	3.352	3.410	3.472	3.535
BITI Mod/Recaps	-	-	-	-	-	-	56.710	58.750	59.787	60.863

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Air Force • President's Budget Submission FY 2017 • Procurement
Exhibit P-1M, Procurement Programs - Modification Summary
(Funding for Modifications)

Modification P-40a Item Title P-3a Modification Title	PYS	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AFNET Ops and Command Comms	-	-	49.049	-	-	-	-	-	-	-
Remote Tracking Station Block Change (RBC)	117.684	34.149	-	-	-	-	-	0.000	0.000	0.000
Air Force Satellite Control Network Recapitalization Projects	0.000	3.131	-	-	-	-	-	-	-	-
Modernization of Eastern Range Network (MEN)	45.585	2.444	-	-	-	-	-	-	-	-
Western Range Modernization of Network (WMN)	30.000	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000
Range Command Destruct Modernization (RCDM)	35.567	15.581	-	-	-	-	-	-	-	-
Spacelift Range System Recapitalization Projects	46.971	2.612	-	-	-	-	-	-	-	-
NAVSTAR GPS-OCS COTS UPGRADE	9.774	12.656	-	-	-	-	-	-	-	-
P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)	-	9.184	-	-	-	-	-	-	-	-
P-3A GEODSS	-	3.124	-	-	-	-	-	-	-	-
SC3I AEWS - FPS-117 EPRP	114.167	3.970	-	-	-	-	-	-	-	-
Next Generation Radar (NEXRAD) WSR-88D Upgrades	1.007	-	0.017	0.017	-	0.017	0.017	0.017	0.017	0.017
Numerical Weather Modeling	3.526	4.549	1.320	1.000	-	1.000	1.000	1.036	1.054	1.135
AN/FMQ-7 Solar Optical Observing Network (SOON)	-	-	-	1.000	-	1.000	-	-	-	-
AN/UMQ-13 MARK IV-B	3.756	3.000	-	1.000	-	1.000	1.500	1.500	1.527	1.542
AN/TMQ-53 Tactical Meteorological Observing System (TMOS)	0.822	0.000	-	0.000	-	0.000	-	-	-	-
WSR-88D Next Generation Radar (NEXRAD) Service Life Extension	-	2.073	2.369	1.932	-	1.932	3.371	1.784	1.654	1.862
Next Generation Radar (NEXRAD) WSR-88D IT Refresh	-	-	0.366	0.172	-	0.172	0.344	0.218	0.385	0.127
Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP)	-	-	3.100	-	-	-	0.800	-	-	-
AN/FMQ-23 Refresh	-	-	-	0.347	-	0.347	-	1.423	1.447	1.462

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Air Force • President's Budget Submission FY 2017 • Procurement
Exhibit P-1M, Procurement Programs - Modification Summary
(Funding for Modifications)

Modification P-40a Item Title P-3a Modification Title	PYS	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Weather Data Analysis	3.679	2.453	1.320	1.000	-	1.000	1.000	1.036	1.054	1.135
P-3A Low Cost Modifications	0.500	-	-	-	-	-	-	-	-	-
ATCALs Low Cost Mods (PE 0305114F)	1.698	1.099	0.761	1.402	-	1.402	1.345	1.209	1.229	1.250
COBRA DANE Radar Mod	-	-	0.150	0.100	-	0.100	-	-	-	-
BMEWS Modification	-	3.565	0.100	0.100	-	0.100	25.436	22.859	23.262	23.681
Network Communications	-	55.831	-	-	-	-	-	-	-	-
Data Links	-	50.338	-	-	-	-	-	-	-	-
Geospatial Intelligence	-	40.954	-	-	-	-	-	-	-	-
Sensor Integration-1	-	-	16.800	4.185	0.000	4.185	15.685	6.196	15.053	16.170
System Release (SR) 3.0	-	-	9.593	2.091	-	2.091	0.276	0.000	13.562	16.131
System Release - 1	-	34.433	-	-	-	-	-	-	-	-
Exhibit P-3a										
WDA	-	5.786	8.825	10.788	0.000	10.788	13.790	11.215	11.708	12.829
Mobile Consolidated Command Center Upgrade Block 00	-	0.000	0.000	7.062	0.000	7.062	0.583	0.000	0.000	0.000
NORAD Cheyenne Mountain Complex Block 00	-	0.000	0.000	16.233	0.000	16.233	0.750	0.000	0.000	0.000
Base Physical Security Systems	35.727	26.157	75.849	84.482	0.000	84.482	53.768	79.674	75.650	49.740
ACD WS 0208088F	-	0.000	0.000	7.736	0.000	7.736	21.533	21.931	22.330	22.731
AFINC/CSCS WS 0303089	-	0.000	17.684	105.586	0.000	105.586	120.753	99.385	77.331	78.650
AFNET	-	90.487	29.448	28.465	0.000	28.465	38.905	40.192	8.125	7.810
Joint Environmental Toolkit (JET) Refresh	-	-	0.000	2.178	0.000	2.178	2.026	1.823	1.856	1.875
ATCALs AN/GRN-29 Instrument Landing System (PE 0305114F)	24.476	13.427	3.219	7.121	0.000	7.121	3.996	0.000	0.000	-
Deployable TACAN Retrofit/Refurbishment	-	0.000	0.000	0.000	3.800	3.800	0.000	0.000	0.000	0.000

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Air Force • President's Budget Submission FY 2017 • Procurement
Exhibit P-1M, Procurement Programs - Modification Summary
(Funding for Modifications)

Modification P-40a Item Title P-3a Modification Title	PYS	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
National Airspace System (NAS) Mod 1	-	-	-	1.519	0.000	1.519	7.435	3.861	5.814	5.918
Mod HEMP	0.000	0.000	49.000	18.943	0.000	18.943	0.000	0.000	0.000	0.000
BMEWS DP/SP Suite Replacement	11.255	26.361	9.858	17.486	0.000	17.486	0.000	0.000	0.000	0.000
PAVE PAWS Block 00 Update	-	0.000	0.000	4.690	0.000	4.690	0.600	0.000	0.000	0.000
P-3A PARCS Modification (formerly PARCS PARSS)	0.000	0.000	0.000	0.750	0.000	0.750	8.763	9.102	8.148	8.294
P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)	0.000	0.000	0.000	0.300	0.000	0.300	8.913	9.103	8.148	8.295
PARCS Block 00 Update	-	0.000	0.000	4.240	0.000	4.240	0.750	0.000	0.000	0.000
Geospatial Intelligence Bulk Release (GB) 4.1	-	0.000	0.293	16.846	0.800	17.646	19.436	31.131	15.178	16.033
Geoint Transformation-1 (GEOINT)	-	0.000	12.067	11.192	0.000	11.192	12.100	12.878	15.236	16.754
Network Infrastructure Transformation-1	-	0.000	51.194	45.415	0.000	45.415	34.886	35.541	21.054	16.726
Multi-Intelligence-1 (Multi-INT)	-	0.000	24.000	23.388	0.000	23.388	29.168	15.390	9.295	15.948
Signal Intelligence Transformation-1 (SIGINT)	-	0.000	7.600	18.057	0.000	18.057	7.682	0.000	15.086	16.736
DCGS Reference Imagery Transition (DRT)	-	0.000	23.655	18.160	0.000	18.160	25.615	34.937	23.770	16.043
Totals (Total Obligation Authority)										
Total Obligation Authority	496.315	545.191	490.516	502.657	4.600	507.257	585.995	570.438	496.296	478.304

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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

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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
GATM	- Global Air Traffic Management
GFE	- Government Furnished Equipment
GFP	- Government Furnished Property
GPS	- Global Positioning System
GSE	- Ground Support Equipment
ICS	- Interim Contractor Support
IOC	- Initial Operating Capability
IPE	- Increased Performance Engine
JPALS	- Joint Precision Approach and Landing System
LANTIRN	- Low Altitude Navigation and Targeting Infra Red System for Night
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
OPF	- 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

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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
SAM	- Surface-to-Air Missile
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
UHF	- Ultra High Frequency
USA	- United States of America
XML	- Extensible Markup Language

BASE / ORGANIZATIONAL ACRONYMS

11 WING	- 11th Support Wing
ACC	- Air Combat Command
AETC	- Air Education & Training Command
AFCAO	- Air Force Computer Acquisition Office
AFCESA	- Air Force Civil Engineering Support Agency
AFCIC	- AF Communications & Information Center
AFCSC	- Air Force Cryptologic Service Center
AFESC	- Air Force Engineering Services Center
AFGWC	- Air Force Global Weather Central
AFIT	- Air Force Institute of Technology
AFLCMC	- Air Force Life Cycle Management Center
AFMC	- Air Force Materiel Command

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AFMETCAL	- Air Force Metrology and Calibration Office
AFMLO	- Air Force Medical Logistics Office
AFNEWS	- Air Force Information & News Service Center
AFOSI	- Air 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
ESC	- Electronic Systems Center
FAA	- Federal Aviation Agency
FBI	- Federal Bureau of Investigation
GSA	- General Services Administration
JCS	- Joint Chiefs of Staff
NATO	- North Atlantic Treaty Organization
OSD	- Office of the Secretary of Defense
PACAF	- Pacific Air Forces
USAF	- United States Air Force
USAFA	- United States Air Force Academy

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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 ACRONYMS

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

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CONTRACTED BY ACRONYMS

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
AFMLO	- 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

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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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 1: Passenger Carrying Vehicles	P-1 Line Item Number / Title: 821800 / Passenger Carrying Vehicles
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	6.528	8.834	14.437	2.003	16.440	14.645	14.831	14.716	14.398	-	90.392
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	6.528	8.834	14.437	2.003	16.440	14.645	14.831	14.716	14.398	-	90.392
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	6.528	8.834	14.437	2.003	16.440	14.645	14.831	14.716	14.398	-	90.392

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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 sortie 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.

Program elements associated with this P-1 Line are: 0202834F, 0207142F, 0207597F, 0305202F, 0502834F, 0502844F, 0702831F.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 1: Passenger Carrying Vehicles	P-1 Line Item Number / Title: 821800 / Passenger Carrying Vehicles
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	154	149	212	15	227	272	236	229	233
	Total Obligation Authority	6.168	8.530	14.093	2.003	16.096	14.300	14.476	14.356	14.025
AFNG	Quantity	3	2	10	-	10	6	6	5	2
	Total Obligation Authority	0.268	0.248	0.221	-	0.221	0.227	0.235	0.230	0.240
AFR	Quantity	4	2	4	-	4	1	1	1	1
	Total Obligation Authority	0.091	0.056	0.123	-	0.123	0.118	0.120	0.130	0.133
Total:	Quantity	161	153	226	15	241	279	243	235	236
Secondary Distribution	Total Obligation Authority	6.528	8.834	14.437	2.003	16.440	14.645	14.831	14.716	14.398

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 1: Passenger Carrying Vehicles	P-1 Line Item Number / Title: 821800 / Passenger Carrying Vehicles
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Passenger Carrying Vehicles			- / -	- / 6.528	- / 8.834	- / 14.437	- / 2.003	- / 16.440
P-40	Total Gross/Weapon System Cost			- / -	- / 6.528	- / 8.834	- / 14.437	- / 2.003	- / 16.440

*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:
 FY17 procurement dollars in the amount of \$14.437M will procure, but not be limited to, 226 vehicles in support of installation and unit mission requirements for Air Force personnel.

 FY17 OCO dollars in the amount of \$2.003M will procure, but not limited to, 15 vehicles in support of Overseas Contingency Operations.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 1						P-1 Line Item Number / Title: 821800 / Passenger Carrying Vehicles						Aggregated Items Title: Passenger Carrying Vehicles								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BUS, 23 PAX SURREY (2310-01-382-3919)	A		-	-	-	87,118.00	2	0.174	88,718.00	1	0.089	-	-	-	99,000.00	1	0.099	99,000.00	1	0.099
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.174		1	0.089	-	-	-		1	0.099		1	0.099
PMA OTHER GOVERNMENT COSTS	A		-	-	-		-	0.011	-	-	0.011	-	-	0.008	-	-	-	-	-	0.008
<i>Secondary Distribution</i>																				
AF			-	-	-		-	-		-	0.011		-	0.008		-	-		-	0.008
AFNG			-	-	-		-	0.011		-	-		-	-		-	-		-	-
SUB COMPACT SEDAN (2310-01-434-2235)	A		-	-	-	19,572.00	14	0.274	22,097.00	11	0.243	24,097.00	30	0.723	-	-	-	24,097.00	30	0.723
<i>Secondary Distribution</i>																				
AF			-	-	-		14	0.274		11	0.243		30	0.723		-	-		30	0.723
HYBRID SEDAN (2310-01-575-5380)	A		-	-	-	22,321.00	2	0.045	22,215.00	4	0.089	24,215.00	21	0.509	-	-	-	24,215.00	21	0.509
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.045		4	0.089		21	0.509		-	-		21	0.509
L.E. SEDAN, UNITED STATES (2310-01-018-6668)	A		-	-	-	22,815.00	64	1.460	28,000.00	34	0.952	30,120.00	69	2.078	-	-	-	30,120.00	69	2.078
<i>Secondary Distribution</i>																				
AF			-	-	-		60	1.369		32	0.896		66	1.988		-	-		66	1.988
AFR			-	-	-		4	0.091		2	0.056		3	0.090		-	-		3	0.090
HI PERFORMANCE SEDAN (2310-01-571-3859)	A		-	-	-	33,033.00	2	0.066	-	-	-	33,033.00	1	0.033	-	-	-	33,033.00	1	0.033
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.066		-	-		-	-		-	-		-	-
AFR			-	-	-		-	-		-	-		1	0.033		-	-		1	0.033
SEDAN, CMPT (2310-01-096-3343)	A		-	-	-	18,155.00	6	0.109	20,083.00	14	0.281	22,083.00	26	0.574	-	-	-	22,083.00	26	0.574
<i>Secondary Distribution</i>																				
AF			-	-	-		6	0.109		14	0.281		16	0.353		-	-		16	0.353
AFNG			-	-	-		-	-		-	-		10	0.221		-	-		10	0.221
STN WGN CMPT CLII (2310-01-055-4948)	A		-	-	-	21,152.00	43	0.910	21,152.00	43	0.910	23,171.00	4	0.093	-	-	-	23,171.00	4	0.093
<i>Secondary Distribution</i>																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 1 **P-1 Line Item Number / Title:** 821800 / Passenger Carrying Vehicles **Aggregated Items Title:** Passenger Carrying Vehicles

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
AF			-	-	-	43	0.910		43	0.910		4	0.093		-	-		4	0.093	
AMB, 44 PAX CONV US (2310-00-289-9082)	A		-	-	-	125,971.00	2	0.252	126,895.00	5	0.634	130,895.00	5	0.654	-	-	-	130,895.00	5	0.654
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.252		5	0.634		5	0.654	-	-	-		5	0.654
AMB, MOD 4X4 US (2310-01-125-9516)	A		-	-	-	170,285.00	3	0.511	171,285.00	4	0.685	173,299.00	9	1.560	173,299.00	3	0.520	173,299.00	12	2.080
<i>Secondary Distribution</i>																				
AF			-	-	-		3	0.511		4	0.685		9	1.560		3	0.520		12	2.080
BUS, 16 PAX US (2310-01-186-2924) (1)	A		-	-	-	60,759.00	2	0.122	66,531.00	1	0.067	70,866.00	5	0.354	-	-	-	70,866.00	5	0.354
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.061		1	0.067		5	0.354		-	-		5	0.354
AFNG			-	-	-		1	0.061		-	-		-	-		-	-		-	-
BUS, 28 PAX US (2310-01-357-8985)	A		-	-	-	98,288.00	11	1.081	131,549.00	20	2.631	131,589.00	17	2.237	131,589.00	5	0.658	131,589.00	22	2.895
<i>Secondary Distribution</i>																				
AF			-	-	-		9	0.885		19	2.499		17	2.237		5	0.658		22	2.895
AFNG			-	-	-		2	0.197		1	0.132		-	-		-	-		-	-
BUS, 41 PAX US (2310-00-877-5647)	A		-	-	-	471,336.00	1	0.471	478,783.00	1	0.479	504,768.00	2	1.010	-	-	-	504,768.00	2	1.010
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.471		1	0.479		2	1.010		-	-		2	1.010
BUS, 44 PAX US (2310-01-357-8986)	A		-	-	-	115,821.00	9	1.042	116,136.00	14	1.626	117,280.00	25	2.932	117,300.00	5	0.587	117,283.33	30	3.519
<i>Secondary Distribution</i>																				
AF			-	-	-		9	1.042		13	1.510		25	2.932		5	0.587		30	3.519
AFNG			-	-	-		-	-		1	0.116		-	-		-	-		-	-
AMBULANCE MODULAR 4X2 (2310-01-129-4702)	A		-	-	-	-	-	-	138,000.00	1	0.138	139,400.00	12	1.673	139,400.00	1	0.139	139,400.00	13	1.812
<i>Secondary Distribution</i>																				
AF			-	-	-		-	-		1	0.138		12	1.673		1	0.139		13	1.812
Subtotal: Uncategorized			-	-	-	-	-	6.528	-	-	8.834	-	-	14.437	-	-	2.003	-	-	16.440
Total			-	-	-	-	-	6.528	-	-	8.834	-	-	14.437	-	-	2.003	-	-	16.440

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 1	P-1 Line Item Number / Title: 821800 / Passenger Carrying Vehicles	Aggregated Items Title: Passenger Carrying Vehicles
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Remarks:

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

UNIT COSTS FOR FY17 ARE SUBJECT TO CHANGE.

PROGRAM MANAGEMENT ADMINISTRATION (PMA) Justification: 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⁾ Only ANG requirement received.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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

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

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	7.639	58.160	24.812	9.066	33.878	81.803	37.154	37.808	38.487	-	294.929
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	7.639	58.160	24.812	9.066	33.878	81.803	37.154	37.808	38.487	-	294.929
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	7.639	58.160	24.812	9.066	33.878	81.803	37.154	37.808	38.487	-	294.929

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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 Ordnance 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.

The FY17 funding request was reduced by \$4.634M to account for the availability of prior year execution balances.

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

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	173	281	174	44	218	521	105	162	174
	Total Obligation Authority	4.440	52.425	21.617	9.066	30.683	78.554	33.870	34.449	35.069
AFNG	Quantity	10	13	12	-	12	10	35	10	23
	Total Obligation Authority	1.914	2.342	1.980	-	1.980	2.017	2.062	2.091	2.131
AFR	Quantity	3	13	7	-	7	7	21	8	16
	Total Obligation Authority	1.286	3.394	1.215	-	1.215	1.232	1.223	1.268	1.287
Total: Secondary Distribution	Quantity	186	307	193	44	237	538	161	180	213
	Total Obligation Authority	7.639	58.160	24.812	9.066	33.878	81.803	37.154	37.808	38.487

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo and Utility Vehicles **P-1 Line Item Number / Title:** 822230 / Medium Tactical Vehicle

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Medium Tactical Vehicle			- / -	- / 7.639	- / 58.160	- / 24.812	- / 9.066	- / 33.878
P-40	Total Gross/Weapon System Cost			- / -	- / 7.639	- / 58.160	- / 24.812	- / 9.066	- / 33.878

*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:

FY17 procurement dollars in the amount of \$24.812M will procure, but is not limited to, 193 vehicles in support of the installation and unit mission requirements for Air Force personnel.

FY17 OCO dollars in the amount of \$9.066 will procure, but is not limited to, 44 vehicles in support of the Overseas Contingency Operations.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
TRK, CGO, MTV, M1083A1P2, W/ OUT WINCH (2320-01-549-8610) (1)	A		-	-	-	191,400.00	10	1.914	191,400.00	110	21.054	202,000.00	1	0.202	-	-	-	202,000.00	1	0.202
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	102	19.523	-	1	0.202	-	-	-	-	1	0.202	
AFNG			-	-	-	10	1.914	-	5	0.957	-	-	-	-	-	-	-	-	-	
AFR			-	-	-	-	-	-	3	0.574	-	-	-	-	-	-	-	-	-	
TRK, CGO, LMTV, M1078A1P2, W/ OUT WINCH (2320-01-549-8577)	A		-	-	-	-	-	-	-	-	145,000.00	4	0.580	-	-	-	145,000.00	4	0.580	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	4	0.580	-	-	-	-	4	0.580	
TRK TRACTOR (2320-01-318-9902)	A		-	-	-	-	-	-	-	-	396,000.00	1	0.396	-	-	-	396,000.00	1	0.396	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	1	0.396	-	-	-	-	1	0.396	
TRK CUCV CGO (2320-01-123-2671)	A		-	-	-	-	-	-	-	-	34,100.00	51	1.739	34,166.00	4	0.137	34,104.80	55	1.876	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	51	1.739	-	4	0.137	-	55	1.876	
TRK CGO 6X6 (2320-01-354-3385)	A		-	-	-	-	-	-	-	-	227,500.00	12	2.730	227,545.00	38	8.647	227,534.20	50	11.377	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	10	2.275	-	38	8.647	-	48	10.922	
AFNG			-	-	-	-	-	-	-	-	-	2	0.455	-	-	-	-	2	0.455	
TRK CGO 6X6 (2320-01-354-3386)	A		-	-	-	-	-	-	-	-	271,800.00	11	2.990	271,721.00	1	0.272	271,793.42	12	3.262	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	8	2.174	-	1	0.272	-	9	2.446	
AFNG			-	-	-	-	-	-	-	-	-	3	0.815	-	-	-	-	3	0.815	
TRUCK, DUMP (2320-01-552-7787)	A		-	-	-	268,919.00	1	0.269	-	-	-	269,000.00	20	5.380	-	-	-	269,000.00	20	5.380
<i>Secondary Distribution</i>																				
AF			-	-	-	-	1	0.269	-	-	-	20	5.380	-	-	-	-	20	5.380	
TRUCK DUMP (2320-01-354-4529)	A		-	-	-	-	-	-	-	-	400,500.00	2	0.801	-	-	-	400,500.00	2	0.801	
<i>Secondary Distribution</i>																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
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								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
AF				-	-		-	-		-	-		2	0.801		-	-		2	0.801
TRK, WRECKER, M1089A1P2 W/WINCH (2320-01-552-7762) (2)	A		-	-	-	428,600.00	5	2.143	428,600.00	22	9.429	429,000.00	11	4.719	-	-	-	429,000.00	11	4.719
<i>Secondary Distribution</i>																				
AF				-	-		2	0.857		13	5.572		11	4.719		-	-		11	4.719
AFNG				-	-		-	-		3	1.286		-	-		-	-		-	-
AFR				-	-		3	1.286		6	2.572		-	-		-	-		-	-
TRK WRECKER (2320-01-354-4528)	A		-	-	-	-	-	-	-	-	-	665,000.00	2	1.330	-	-	-	665,000.00	2	1.330
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		1	0.665		-	-		1	0.665
AFNG				-	-		-	-		-	-		1	0.665		-	-		1	0.665
TRK, CGO, MTV, M1078A1P2, W/ OUT WINCH (2320-01-549-8611) (3)	A		-	-	-	169,000.00	10	1.690	171,968.35	158	27.171	173,500.00	7	1.215	-	-	-	173,500.00	7	1.215
<i>Secondary Distribution</i>																				
AF				-	-		10	1.690		158	27.171		-	-		-	-		-	-
AFR				-	-		-	-		-	-		7	1.215		-	-		7	1.215
TLR TK WTR, M149A1 (2330-00-060-6511)	A		-	-	-	40,000.00	12	0.480	38,000.00	4	0.152	38,000.00	13	0.494	-	-	-	38,000.00	13	0.494
<i>Secondary Distribution</i>																				
AF				-	-		12	0.480		3	0.114		13	0.494		-	-		13	0.494
AFR				-	-		-	-		1	0.038		-	-		-	-		-	-
TLR, ISO CONTAINER M872 (2330-01-142-1385)	A		-	-	-	70,500.00	1	0.071	70,000.00	4	0.280	70,500.00	10	0.705	-	-	-	70,500.00	10	0.705
<i>Secondary Distribution</i>																				
AF				-	-		1	0.071		-	-		10	0.705		-	-		10	0.705
AFNG				-	-		-	-		1	0.070		-	-		-	-		-	-
AFR				-	-		-	-		3	0.210		-	-		-	-		-	-
TLR, 5T FLATBED, M843 (2330-00-210-8935)	A		-	-	-	-	-	-	-	-	-	10,100.00	25	0.253	11,000.00	1	0.011	10,134.62	26	0.264
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		25	0.253		1	0.011		26	0.264

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
TLR, 2.5T CHS, M200 (2330-00-540-3950)	A		-	-	-	7,238.00	147	1.064	7,200.00	9	0.065	7,500.00	10	0.075	-	-	-	7,500.00	10	0.075
<i>Secondary Distribution</i>																				
AF				-	-		147	1.064		5	0.036		4	0.030		-	-		4	0.030
AFNG				-	-		-	-		4	0.029		6	0.045		-	-		6	0.045
DOLLY SET (2330-01-378-9997)	A		-	-	-	-	-	-	-	-	-	92,000.00	13	1.196	-	-	-	92,000.00	13	1.196
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		13	1.196		-	-		13	1.196
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.009	-	-	0.009	-	-	0.008	-	-	-	-	-	0.008
<i>Secondary Distribution</i>																				
AF				-	-		-	0.009		-	0.009		-	0.008		-	-		-	0.008
Subtotal: Uncategorized			-	-	-	-	-	7.639	-	-	58.160	-	-	24.812	-	-	9.066	-	-	33.878
Total			-	-	-	-	-	7.639	-	-	58.160	-	-	24.812	-	-	9.066	-	-	33.878

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 FY17 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) Quantities may change upon release of the Tactical Wheeled Vehicle Strategy.
 - (2) Quantities may change upon release of the Tactical Wheeled Vehicle Strategy.
 - (3) Quantities may change upon release of the Tactical Wheeled Vehicle Strategy.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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

P-1 Line Item Number / Title:
822910 / Cap 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	1.700	1.700	0.984	-	0.984	1.001	1.019	1.038	1.057	-	8.499
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	1.700	1.700	0.984	-	0.984	1.001	1.019	1.038	1.057	-	8.499
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	1.700	1.700	0.984	-	0.984	1.001	1.019	1.038	1.057	-	8.499

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo and Utility Vehicles **P-1 Line Item Number / Title:** 822910 / Cap 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Cap Vehicles			- / -	- / 1.700	- / 1.700	- / 0.984	- / -	- / 0.984
P-40	Total Gross/Weapon System Cost			- / -	- / 1.700	- / 1.700	- / 0.984	- / -	- / 0.984

*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:

FY17 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.

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.

CAP is a grant recipient; as such, AF central procurement processes are not applicable.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2 **P-1 Line Item Number / Title:** 822910 / Cap Vehicles **Aggregated Items Title:** Cap Vehicles

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
CAP Vehicles																				
7 PAX VAN	A		-	-	-	0.029	16	0.471	0.030	15	0.443	0.030	8	0.240	-	-	-	0.030	8	0.240
12 PAX VAN	A		-	-	-	0.033	19	0.618	0.031	20	0.624	0.032	13	0.417	-	-	-	0.032	13	0.417
SEDAN	A		-	-	-	-	-	-	0.027	2	0.053	0.027	1	0.027	-	-	-	0.027	1	0.027
8 PAX 4X4	A		-	-	-	0.037	8	0.295	0.037	8	0.296	0.038	3	0.113	-	-	-	0.038	3	0.113
PICK-UP TRUCK	A		-	-	-	0.033	6	0.201	0.034	5	0.169	0.034	3	0.101	-	-	-	0.034	3	0.101
5 PAX SUV	A		-	-	-	0.029	4	0.114	0.029	4	0.115	0.029	3	0.086	-	-	-	0.029	3	0.086
Subtotal: CAP Vehicles			-	-	-	-	-	1.700	-	-	1.700	-	-	0.984	-	-	-	-	-	0.984
Total			-	-	-	-	-	1.700	-	-	1.700	-	-	0.984	-	-	-	-	-	0.984

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

Remarks:

CAP is a grant recipient; as such, AF central procurement processes are not applicable. CAP procurement processes/standards are described in Department of Defense Grant & Agreement Regulations.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo and Utility Vehicles **P-1 Line Item Number / Title:** 822990 / 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:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	27.778	12.483	11.191	12.264	23.455	14.161	8.478	8.886	9.106	-	104.347
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	27.778	12.483	11.191	12.264	23.455	14.161	8.478	8.886	9.106	-	104.347
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	27.778	12.483	11.191	12.264	23.455	14.161	8.478	8.886	9.106	-	104.347

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY15 funding totals include \$3M 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, 028028F, 0305114F, 0401221F, 0502834F, 0502844F, 0702831F.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	759	267	241	381	622	311	48	150	193
	Total Obligation Authority	27.778	10.040	7.862	12.264	20.126	10.820	4.610	5.522	5.678
AFNG	Quantity	-	-	9	-	9	8	9	3	8
	Total Obligation Authority	-	-	0.284	-	0.284	0.280	0.279	0.297	0.303
AFR	Quantity	-	79	88	-	88	57	77	83	71
	Total Obligation Authority	-	2.443	3.045	-	3.045	3.061	3.589	3.067	3.125
Total:	Quantity	759	346	338	381	719	376	134	236	272

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo and Utility Vehicles	P-1 Line Item Number / Title: 822990 / Items Less Than \$5 Million
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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	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Secondary Distribution	Total Obligation Authority	27.778	12.483	11.191	12.264	23.455	14.161	8.478	8.886	9.106

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 2: Cargo and Utility Vehicles **P-1 Line Item Number / Title:** 822990 / 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:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Items Less Than \$5 Million			- / -	- / 27.778	- / 12.483	- / 11.191	- / 12.264	- / 23.455
P-40	Total Gross/Weapon System Cost			- / -	- / 27.778	- / 12.483	- / 11.191	- / 12.264	- / 23.455

*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:
 FY17 procurement dollars in the amount of \$11.191M will procure, but is not limited, to 338 vehicles in support of installation and unit mission requirements for Air Force personnel.

 FY17 OCO dollars in the amount of \$12.264M will procure, but is not limited, to 381 vehicles in support of Overseas Contingency Operations.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2						P-1 Line Item Number / Title: 822990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
TRAILER, 38 FT. SEMI (2330-01-381-9477)	A		-	-	-	43,249.00	99	4.282	44,000.00	40	1.760	44,000.00	12	0.528	-	-	-	44,000.00	12	0.528
<i>Secondary Distribution</i>																				
AF			-	-	-		99	4.282		40	1.760		5	0.220		-	-		5	0.220
AFNG			-	-	-		-	-		-	-		5	0.220		-	-		5	0.220
AFR			-	-	-		-	-		-	-		2	0.088		-	-		2	0.088
TRAILER, FLAT BED, 45 FT. AIR RIDE (2330-01-061-8609)	A		-	-	-	-	-	-	40,751.00	6	0.245	-	-	-	41,000.00	1	0.041	41,000.00	1	0.041
<i>Secondary Distribution</i>																				
AF			-	-	-		-	-		6	0.245		-	-		1	0.041		1	0.041
TRAILER, 50 TON LOWBED (2330-01-058-5911)	A		-	-	-	61,592.00	4	0.246	78,055.00	15	1.171	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		4	0.246		15	1.171		-	-		-	-		-	-
TRAILER, LOWBED, TILT DECK, 22 TON (2330-00-138-3011)	A		-	-	-	67,833.00	9	0.610	68,000.00	5	0.340	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		9	0.610		5	0.340		-	-		-	-		-	-
TRUCK, PICKUP, CREW CAB, 1/2T, 4X4 (2320-01-484-6748)	A		-	-	-	30,397.00	96	2.918	32,000.00	9	0.288	33,000.00	9	0.297	-	-	-	33,000.00	9	0.297
<i>Secondary Distribution</i>																				
AF			-	-	-		96	2.918		7	0.224		9	0.297		-	-		9	0.297
AFR			-	-	-		-	-		2	0.064		-	-		-	-		-	-
TRUCK, PICKUP CREW CAB 4X4, 3/4T CU (2320-00-580-2955)	A		-	-	-	28,243.00	78	2.203	32,000.00	22	0.704	34,000.00	25	0.850	34,000.00	56	1.904	34,000.00	81	2.754
<i>Secondary Distribution</i>																				
AF			-	-	-		78	2.203		15	0.480		14	0.476		56	1.904		70	2.380
AFR			-	-	-		-	-		7	0.224		11	0.374		-	-		11	0.374
TRUCK, PICKUP CREW CAB 4X2, 3/4T CU (2320-00-580-2954)	A		-	-	-	24,475.00	43	1.052	27,291.00	24	0.655	31,000.00	19	0.589	31,000.00	25	0.775	31,000.00	44	1.364
<i>Secondary Distribution</i>																				
AF			-	-	-		43	1.052		20	0.546		16	0.496		25	0.775		41	1.271

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2 **P-1 Line Item Number / Title:** 822990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
AFR				-	-		-	-		4	0.109		3	0.093		-	-		3	0.093
TRUCK, STAKE AND PLATFORM 4X2 10000GVW (2320-01-250-7367)	A		-	-	-	41,943.00	16	0.671	30,000.00	8	0.240	30,000.00	7	0.210	-	-	-	30,000.00	7	0.210
<i>Secondary Distribution</i>																				
AF				-	-		16	0.671		3	0.090		7	0.210		-	-		7	0.210
AFR				-	-		-	-		5	0.150		-	-		-	-		-	-
TRUCK, CARRYALL 4X2 8 PAX (2320-00-879-7662)	A		-	-	-	24,604.00	8	0.197	25,000.00	15	0.375	27,000.00	11	0.297	27,000.00	25	0.675	27,000.00	36	0.972
<i>Secondary Distribution</i>																				
AF				-	-		8	0.197		15	0.375		11	0.297		25	0.675		36	0.972
TRUCK, CARRYALL 4X2 15 PAX (2320-01-036-6569)	A		-	-	-	26,409.00	11	0.290	28,000.00	13	0.364	28,000.00	13	0.364	-	-	-	28,000.00	13	0.364
<i>Secondary Distribution</i>																				
AF				-	-		11	0.290		10	0.280		13	0.364		-	-		13	0.364
AFR				-	-		-	-		3	0.084		-	-		-	-		-	-
TRUCK, CARRYALL 4X2 7 PAX (2320-01-173-6113)	A		-	-	-	22,715.00	2	0.045	24,245.00	8	0.194	24,300.00	33	0.802	-	-	-	24,300.00	33	0.802
<i>Secondary Distribution</i>																				
AF				-	-		2	0.045		8	0.194		30	0.729		-	-		30	0.729
AFR				-	-		-	-		-	-		3	0.073		-	-		3	0.073
TRUCK, PICKUP 4X4 1/2 T 4600 & 5799 GVW (2320-00-811-6869)	A		-	-	-	22,242.00	28	0.623	22,575.00	20	0.452	24,200.00	33	0.799	-	-	-	24,200.00	33	0.799
<i>Secondary Distribution</i>																				
AF				-	-		28	0.623		8	0.181		30	0.726		-	-		30	0.726
AFR				-	-		-	-		12	0.271		3	0.073		-	-		3	0.073
SUV, 4X4 COMPACT 4500 GVW (2320-01-563-7478)	A		-	-	-	23,554.00	1	0.024	24,694.00	11	0.272	25,000.00	2	0.050	-	-	-	25,000.00	2	0.050
<i>Secondary Distribution</i>																				
AF				-	-		1	0.024		3	0.074		2	0.050		-	-		2	0.050
AFR				-	-		-	-		8	0.198		-	-		-	-		-	-
VAN, MAINTENANCE UTILITY DELIVERY (2320-01-176-2223)	A		-	-	-	34,391.00	90	3.095	36,899.00	43	1.587	37,000.00	37	1.369	37,000.00	37	1.369	37,000.00	74	2.738
<i>Secondary Distribution</i>																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2 **P-1 Line Item Number / Title:** 822990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
AF				-	-		90	3,095		39	1,439		22	0,814		37	1,369		59	2,183
AFR				-	-		-	-		4	0,148		15	0,555		-	-		15	0,555
TRUCK, TRACTOR 44.5G (2320-00-271-1432)	A		-	-	-	139,327.00	11	1,533	132,000.00	8	1,056	134,000.00	9	1,206	-	-	-	134,000.00	9	1,206
<i>Secondary Distribution</i>																				
AF				-	-		11	1,533		6	0,792		7	0,938		-	-		7	0,938
AFR				-	-		-	-		2	0,264		2	0,268		-	-		2	0,268
TRUCK, VAN PANEL 4X2 (2320-01-013-2754)	A		-	-	-	20,798.00	32	0,666	21,100.00	19	0,401	22,000.00	7	0,154	-	-	-	22,000.00	7	0,154
<i>Secondary Distribution</i>																				
AF				-	-		32	0,666		11	0,232		1	0,022		-	-		1	0,022
AFR				-	-		-	-		8	0,169		6	0,132		-	-		6	0,132
TRUCK, TRACTOR 39.5G (1) (2320-01-341-7627)	A		-	-	-	120,000.00	26	3,120	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		26	3,120		-	-		-	-		-	-		-	-
TRUCK, 1/2 T REG CAB 4X2 (2320-00-540-1428)	A		-	-	-	20,322.00	40	0,813	21,300.00	13	0,277	24,000.00	28	0,672	-	-	-	24,000.00	28	0,672
<i>Secondary Distribution</i>																				
AF				-	-		40	0,813		13	0,277		23	0,552		-	-		23	0,552
AFR				-	-		-	-		-	-		5	0,120		-	-		5	0,120
1/4 TON 4X4 EXT CAB P/U (2320-01-500-9498)	A		-	-	-	27,619.00	2	0,055	29,386.00	6	0,176	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		2	0,055		6	0,176		-	-		-	-		-	-
TRUCK, COMPACT CREW CAB 4X4 (2320-01-500-5203)	A		-	-	-	29,639.00	11	0,326	29,936.00	6	0,180	30,000.00	9	0,270	30,000.00	236	7,080	30,000.00	245	7,350
<i>Secondary Distribution</i>																				
AF				-	-		11	0,326		6	0,180		2	0,060		236	7,080		238	7,140
AFR				-	-		-	-		-	-		7	0,210		-	-		7	0,210
TRUCK, PICKUP CREW CAB 4X2 (2320-01-504-1443)	A		-	-	-	26,051.00	9	0,234	26,229.00	15	0,393	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		9	0,234		5	0,131		-	-		-	-		-	-

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2						P-1 Line Item Number / Title: 822990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
AFR				-	-		-	-		10	0.262		-	-		-	-		-	-
TRUCK, 1/4 TON 4X2 EXT CAB (2320-01-496-0404)	A		-	-	-	25,054.00	50	1.253	26,550.00	6	0.159	27,000.00	52	1.404	-	-	-	27,000.00	52	1.404
<i>Secondary Distribution</i>																				
AF				-	-		50	1.253		6	0.159		31	0.837		-	-		31	0.837
AFR				-	-		-	-		-	-		21	0.567		-	-		21	0.567
TRUCK, 4X2 UTILITY 9 PAX (2320-01-441-6916)	A		-	-	-	36,201.00	4	0.145	37,886.00	6	0.227	38,000.00	3	0.114	-	-	-	38,000.00	3	0.114
<i>Secondary Distribution</i>																				
AF				-	-		4	0.145		5	0.189		3	0.114		-	-		3	0.114
AFR				-	-		-	-		1	0.038		-	-		-	-		-	-
12 TON STAKE PLATF M TRAILER (2330-01-331-8867)	A		-	-	-	41,711.00	1	0.042	41,952.00	6	0.252	42,600.00	1	0.043	-	-	-	42,600.00	1	0.043
<i>Secondary Distribution</i>																				
AF				-	-		1	0.042		6	0.252		1	0.043		-	-		1	0.043
TRUCK, 1/2 TON CREW CAB 4X2 (2320-01-484-6745)	A		-	-	-	22,732.00	2	0.045	24,000.00	6	0.144	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		2	0.045		6	0.144		-	-		-	-		-	-
1 TON STAKE PLATFORM 4X2 (2320-00-851-8481)	A		-	-	-	25,568.00	9	0.230	25,768.00	10	0.258	30,000.00	7	0.210	-	-	-	30,000.00	7	0.210
<i>Secondary Distribution</i>																				
AF				-	-		9	0.230		2	0.052		2	0.060		-	-		2	0.060
AFR				-	-		-	-		8	0.206		5	0.150		-	-		5	0.150
20 TON 25 FT STLR (2330-00-899-7527)	A		-	-	-	40,764.00	9	0.367	-	-	-	39,000.00	5	0.195	-	-	-	39,000.00	5	0.195
<i>Secondary Distribution</i>																				
AF				-	-		9	0.367		-	-		5	0.195		-	-		5	0.195
STLR L/B 35 TON (2330-01-051-6648)	A		-	-	-	45,446.00	7	0.318	51,243.00	6	0.307	62,000.00	4	0.248	-	-	-	62,000.00	4	0.248
<i>Secondary Distribution</i>																				
AF				-	-		7	0.318		1	0.051		1	0.062		-	-		1	0.062
AFR				-	-		-	-		5	0.256		3	0.186		-	-		3	0.186
STLR VAN 30 FT 12 TON (2330-00-865-5443)	A		-	-	-	30,530.00	3	0.092	-	-	-	33,000.00	1	0.033	-	-	-	33,000.00	1	0.033
<i>Secondary Distribution</i>																				

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2 **P-1 Line Item Number / Title:** 822990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
AF				-	-		3	0.092		-	-		1	0.033		-	-		1	0.033
TRK TRAC 80K GVW (2320-01-482-9775)	A		-	-	-	154,784.00	2	0.310	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		2	0.310		-	-		-	-		-	-		-	-
STLR 20T 40FT (2320-01-094-0007)	A		-	-	-	76,321.00	1	0.076	-	-	-	78,000.00	3	0.234	-	-	-	78,000.00	3	0.234
<i>Secondary Distribution</i>																				
AF				-	-		1	0.076		-	-		1	0.078		-	-		1	0.078
AFR				-	-		-	-		-	-		2	0.156		-	-		2	0.156
TLR FLATBED 5-6T (2330-00-877-5646)	A		-	-	-	16,925.00	11	0.186	-	-	-	19,000.00	1	0.019	-	-	-	19,000.00	1	0.019
<i>Secondary Distribution</i>																				
AF				-	-		11	0.186		-	-		1	0.019		-	-		1	0.019
TRUCK PICKUP, REG CAB 4X4, 3/4T (2320-01-532-2772)	A		-	-	-	25,058.00	1	0.025	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		1	0.025		-	-		-	-		-	-		-	-
TRK TRAC 55 GVW (23200-01-058-5724)	A		-	-	-	131,476.00	1	0.131	-	-	-	134,400.00	1	0.134	-	-	-	134,400.00	1	0.134
<i>Secondary Distribution</i>																				
AF				-	-		1	0.131		-	-		1	0.134		-	-		1	0.134
CARGO VAN (2320-01-543-6363)	A		-	-	-	-	-	-	-	-	-	16,000.00	6	0.096	-	-	-	16,000.00	6	0.096
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		2	0.032		-	-		2	0.032
AFNG				-	-		-	-		-	-		4	0.064		-	-		4	0.064
TRK TRACTOR (2320-01-482-9775)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRUCK, CARRYALL 4X4 7500 GVW (2320-00-950-4238)	A		-	-	-	34,500.00	22	0.759	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		22	0.759		-	-		-	-		-	-		-	-
STLR LB 60 TON (2320-00-349-2572)	A		-	-	-	78,867.00	2	0.158	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		2	0.158		-	-		-	-		-	-		-	-
STLR LB 25T (2330-00-899-7526)	A		-	-	-	39,891.00	1	0.040	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2 **P-1 Line Item Number / Title:** 822990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				-	-		1	0.040		-	-		-	-		-	-		-	
TLR FB3 & 8T (2330-00-014-0494)	A		-	-	-	5,877.00	3	0.018	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		3	0.018		-	-		-	-		-	-		-	
TRK CGO 4DR (2320-01-424-2760)	A		-	-	-	34,495.00	12	0.414	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		12	0.414		-	-		-	-		-	-		-	
TRK CGO 4X4 (2320-00-801-7593)	A		-	-	-	93,257.00	1	0.093	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		1	0.093		-	-		-	-		-	-		-	
TRK STK 4X2 (2320-01-064-8540)	A		-	-	-	69,585.00	1	0.070	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		1	0.070		-	-		-	-		-	-		-	
4x4 CREWCAB UTILITY TRUCK (2320-01-395-1368) (2)	A		-	-	-	-	-	-	-	-	-	-	-	420,000.00	1	0.420	420,000.00	1	0.420	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		1	0.420		1	
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.003	-	-	0.007	-	-	0.004	-	-	-	-	0.004	
<i>Secondary Distribution</i>																				
AF				-	-		-	0.003		-	0.007		-	0.004		-	-		-	
AFR				-	-		-	-		-	-		-	-		-	-		-	
Subtotal: Uncategorized			-	-	-	-	-	27.778	-	-	12.483	-	-	11.191	-	-	12.264	-	23.455	
Total			-	-	-	-	-	27.778	-	-	12.483	-	-	11.191	-	-	12.264	-	23.455	

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 2	P-1 Line Item Number / Title: 822990 / Items Less Than \$5 Million	Aggregated Items Title: Items Less Than \$5 Million

Remarks:

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

FY17 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⁾ (Airfield Damage Repair) FY15 OCO REQ

⁽²⁾ PEC 0305114F AIR TRAFFIC CONTROL, APPROACH AND LANDING SYSTEM (ATCAL).

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles

P-1 Line Item Number / Title:
823230 / Security And Tactical 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	10.027	4.728	5.361	-	5.361	4.986	35.290	35.739	36.382	-	132.513
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	10.027	4.728	5.361	-	5.361	4.986	35.290	35.739	36.382	-	132.513
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	10.027	4.728	5.361	-	5.361	4.986	35.290	35.739	36.382	-	132.513

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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. In the future, funding will be used to procure next generation security and tactical vehicles.

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.

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, retrofits, spares, repairs, deployment packages and returns. 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.

Funding for this exhibit contained in PEs 0202834F, 0207227F, 0502834F, 0502844F, 0702831F, 0804731F.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF									
Quantity	833	109	97	-	97	14	379	331	304
Total Obligation Authority	8.875	4.728	5.361	-	5.361	4.986	34.396	34.830	35.464

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles **P-1 Line Item Number / Title:** 823230 / Security And Tactical 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 **Item MDAP/MAIS Code(s):** N/A

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AFNG	Quantity	91	-	-	-	-	-	21	6	6
	Total Obligation Authority	0.728	-	-	-	-	-	0.470	0.474	0.480
AFR	Quantity	53	-	-	-	-	-	55	3	3
	Total Obligation Authority	0.424	-	-	-	-	-	0.424	0.435	0.438
Total:	Quantity	977	109	97	-	97	14	455	340	313
Secondary Distribution	Total Obligation Authority	10.027	4.728	5.361	-	5.361	4.986	35.290	35.739	36.382

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles

P-1 Line Item Number / Title:
823230 / Security And Tactical 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Security And Tactical Vehicles			- / -	- / 10.027	- / 4.728	- / 5.361	- / -	- / 5.361
P-40	Total Gross/Weapon System Cost			- / -	- / 10.027	- / 4.728	- / 5.361	- / -	- / 5.361

*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:
FY17 funding procures, but is not limited to, 88 trailers and 9 Guardian Angel Air Deployable Rescue Vehicles in support of installation and unit mission requirements for Air Force Personnel.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 3 **P-1 Line Item Number / Title:** 823230 / Security And Tactical Vehicles **Aggregated Items Title:** Security And Tactical Vehicles

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
HIGH MOBILITY TRAILER, LIGHT M1101 (NSN 2330-01-388-6662)	A		-	-	-	5,000.00	460	2.300	5,430.00	100	0.543	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-		460	2.300		100	0.543		-	-		-	-		-	
M1102 TRAILER (NSN: 2330-01-387-5426)	A		-	-	-	7,250.00	100	0.725	-	-	-	8,000.00	27	0.216	-	-	-	8,000.00	27	0.216
<i>Secondary Distribution</i>																				
AF			-	-	-		100	0.725		-	-		27	0.216		-	-		27	0.216
GUARDIAN ANGEL AIR-DEPLOYABLE RESCUE VEHICLE (GAARV)	A		-	-	-	531,285.71	7	3.719	431,666.67	9	3.885	435,555.56	9	3.920	-	-	-	435,555.56	9	3.920
<i>Secondary Distribution</i>																				
AF			-	-	-		7	3.719		9	3.885		9	3.920		-	-		9	3.920
HMMWV M1152A1 (2320-01-540-2007) (1)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRL CGO 1.5T M105 (2330-00-541-6466)	A		-	-	-	8,000.00	410	3.280	-	-	-	10,250.00	61	0.625	-	-	-	10,250.00	61	0.625
<i>Secondary Distribution</i>																				
AF			-	-	-		266	2.128		-	-		61	0.625		-	-		61	0.625
AFNG			-	-	-		91	0.728		-	-		-	-		-	-		-	-
AFR			-	-	-		53	0.424		-	-		-	-		-	-		-	-
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.003	-	-	0.005	-	-	0.005	-	-	-	-	-	0.005
<i>Secondary Distribution</i>																				
AF			-	-	-		-	0.003		-	0.005		-	0.005		-	-		-	0.005
PMA CONTRACTOR SERVICES	A		-	-	-	-	-	-	-	-	0.295	-	-	0.595	-	-	-	-	-	0.595
<i>Secondary Distribution</i>																				
AF			-	-	-		-	-		-	0.295		-	0.595		-	-		-	0.595
Subtotal: Uncategorized			-	-	-	-	-	10.027	-	-	4.728	-	-	5.361	-	-	-	-	-	5.361
Total			-	-	-	-	-	10.027	-	-	4.728	-	-	5.361	-	-	-	-	-	5.361

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 3	P-1 Line Item Number / Title: 823230 / Security And Tactical Vehicles	Aggregated Items Title: Security And Tactical Vehicles
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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:

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

GAARV unit cost is approximately \$275,000 per vehicle and does not include training, upgrades, retrofits, spares, repairs, deployment packages and returns.

Unit costs for FY17 are subject to change.

Footnotes:

⁽¹⁾ Currently being used as a placeholder for JLTV

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles

P-1 Line Item Number / Title:
823990 / 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:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	9.781	4.662	4.623	16.789	21.412	8.690	15.520	16.333	16.344	-	92.742
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	9.781	4.662	4.623	16.789	21.412	8.690	15.520	16.333	16.344	-	92.742
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	9.781	4.662	4.623	16.789	21.412	8.690	15.520	16.333	16.344	-	92.742

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY15 funding totals include \$1.878M 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, lavatory service trucks, high reach maintenance trucks, glycol recovery vehicles, diable 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 defual 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, 0402834F, 0502834F, 0702831F.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	133	6	18	79	97	46	55	51	50
Total Obligation Authority	9.781	1.208	1.695	16.789	18.484	6.550	13.355	14.113	14.084
AFNG	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	-	-	-	-	-	-	-	-
AFR	-	29	19	-	19	15	15	10	10
Total Obligation Authority	-	3.454	2.929	-	2.929	2.140	2.165	2.220	2.260

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles	P-1 Line Item Number / Title: 823990 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Total:	Quantity	133	35	37	79	116	61	70	61	60
Secondary Distribution	Total Obligation Authority	9.781	4.662	4.623	16.789	21.412	8.690	15.520	16.333	16.344

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 3: Special Purpose Vehicles **P-1 Line Item Number / Title:** 823990 / 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:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Items Less Than \$5 Million			- / -	- / 9.781	- / 4.662	- / 4.623	- / 16.789	- / 21.412
P-40	Total Gross/Weapon System Cost			- / -	- / 9.781	- / 4.662	- / 4.623	- / 16.789	- / 21.412

*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:
 FY17 funding procures, but is not limited to, 37 vehicles in support of installation and unit mission requirements for Air Force personnel.

 FY17 OCO dollars procure, but is not limited to 79 vehicles in support of Overseas Contingency Operations.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 3						P-1 Line Item Number / Title: 823990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
C5 STAIRCASE TRK (1730-01-602-5661YW)	A		-	-	-	-	-	-	-	-	0.301	1	0.301	-	-	-	0.301	1	0.301	
<i>Secondary Distribution</i>																				
AFR			-	-	-	-	-	-	-	-		1	0.301		-	-		1	0.301	
TRK HILIFT (2320-00-540-3489)	A		-	-	-	-	-	-	-	-	0.190	1	0.190	-	-	-	0.190	1	0.190	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-		1	0.190		-	-		1	0.190	
4000GAL DEICER (1730-01-605-7637YW)	A		-	-	-	-	-	-	-	-	0.304	2	0.608	0.304	8	2.434	0.304	10	3.042	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-		2	0.608		8	2.434		10	3.042	
TRAC ACFT TWG MB-4 (1740-00-580-7990YW)	A		-	-	0.094	2	0.188	-	-	-	0.111	1	0.111	-	-	-	0.111	1	0.111	
<i>Secondary Distribution</i>																				
AF			-	-		2	0.188		-	-		1	0.111		-	-		1	0.111	
TOW TRACTOR, MB-2 (1740-00-143-8464YW)	A		-	-	0.132	2	0.264	-	-	-	0.130	1	0.130	-	-	-	0.130	1	0.130	
<i>Secondary Distribution</i>																				
AF			-	-		2	0.264		-	-		-	-		-	-		-	-	
AFR			-	-		-	-		-	-		1	0.130		-	-		1	0.130	
FLIGHT LINE TOW TRACTOR, 4X2 (1740-01-068-8945YW)	A		-	-	0.045	61	2.727	0.043	14	0.602	0.045	6	0.270	0.045	16	0.720	0.045	22	0.990	
<i>Secondary Distribution</i>																				
AF			-	-		61	2.727		-	-		6	0.270		16	0.720		22	0.990	
AFR			-	-		-	-		14	0.602		-	-		-	-		-	-	
TRUCK, HI- LIFT 9T (2320-00-540-3991)	A		-	-	-	-	-	0.274	1	0.274	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-		-	-		1	0.274		-	-		-	-		-	-	
TRUCK, MAINTENANCE 3/4T 4X4 (2320-00-541-1714)	A		-	-	0.028	7	0.197	0.031	1	0.031	0.033	1	0.033	-	-	-	0.033	1	0.033	
<i>Secondary Distribution</i>																				
AF			-	-		7	0.197		-	-		1	0.033		-	-		1	0.033	
AFR			-	-		-	-		1	0.031		-	-		-	-		-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 3						P-1 Line Item Number / Title: 823990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million									
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total			
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
TRUCK, TELEPHONE MAINT STD UTIL 4x2 (2320-00-801-9193)	A		-	-	-	0.026	11	0.282	-	-	-	0.035	6	0.210	-	-	-	0.035	6	0.210	
<i>Secondary Distribution</i>																					
AF							11	0.282													
AFR													6	0.210						6	0.210
3 TON STAKE AND PLATFORM (2320-00-935-4696)	A		-	-	-	-	-	-	-	-	-	0.166	3	0.498	-	-	-	0.166	3	0.498	
<i>Secondary Distribution</i>																					
AFR													3	0.498						3	0.498
TRK TANK 1200G 4X2 (2320-00-177-6777)	A		-	-	-	-	-	-	0.117	4	0.468	0.126	1	0.126	-	-	-	0.126	1	0.126	
<i>Secondary Distribution</i>																					
AFR										4	0.468		1	0.126						1	0.126
TRK TNK FUEL 6000GAL R-11 (2320-00-433-5695)	A		-	-	-	0.147	2	0.294	0.197	9	1.770	0.200	4	0.800	0.200	3	0.600	0.200	7	1.400	
<i>Secondary Distribution</i>																					
AF							2	0.294		3	0.591					3	0.600			3	0.600
AFR										6	1.179		4	0.800						4	0.800
TRUCK, EXTENDED REACH DEICER (1730-01-495-5449YW) (1)	A		-	-	-	0.626	3	1.878	0.643	1	0.643	-	-	-	0.663	6	3.980	0.663	6	3.980	
<i>Secondary Distribution</i>																					
AF							3	1.878								6	3.980			6	3.980
AFR										1	0.643										
TRK MNT DIGGER DERRICK (2320-01-397-7528)	A		-	-	-	-	-	-	0.277	1	0.277	0.288	3	0.863	-	-	-	0.288	3	0.863	
<i>Secondary Distribution</i>																					
AFR										1	0.277		3	0.863						3	0.863
GLYCOL RECOVERY VEHICLE (3825-01-584-7127)	A		-	-	-	-	-	-	0.340	1	0.340	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																					
AF										1	0.340										
TRLR MAINT (2330-01-308-8926)	A		-	-	-	-	-	-	-	-	-	0.012	5	0.060	-	-	-	0.012	5	0.060	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 3 **P-1 Line Item Number / Title:** 823990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total			
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
<i>Secondary Distribution</i>																					
AF				-	-		-	-		-	-		5	0.060		-	-		5	0.060	
2000GAL DEICER (1730-01-605-7636YW)	A		-	-	-		-	-		-	-	0.210	2	0.420		-	-	0.210	2	0.420	
<i>Secondary Distribution</i>																					
AF				-	-		-	-		-	-		2	0.420		-	-		2	0.420	
PMA OTHER GOVERNMENT COSTS	A		-	-	-		-	0.001	0.003	1	0.003		-	-	0.002		-	-		-	0.002
<i>Secondary Distribution</i>																					
AF				-	-		-	0.001		1	0.003		-	0.002		-	-		-	0.002	
TRK VAN MSL CREWCAB (2320-01-375-5833)	A		-	-	-	0.121	3	0.362		-	-		-	-		-	-		-	-	
<i>Secondary Distribution</i>																					
AF				-	-		3	0.362		-	-		-	-		-	-		-	-	
TRL CBL REEL (2330-00-998-1058)	A		-	-	-	0.024	2	0.048		-	-		-	-		-	-		-	-	
<i>Secondary Distribution</i>																					
AF				-	-		2	0.048		-	-		-	-		-	-		-	-	
TRK STK 4X2 (2320-00-451-2184)	A		-	-	-	0.038	32	1.217		-	-		-	-		-	-		-	-	
<i>Secondary Distribution</i>																					
AF				-	-		32	1.217		-	-		-	-		-	-		-	-	
TRK MNT EXT CAB 4X4 (2320-01-513-8386)	A		-	-	-	0.100	2	0.200	0.127	2	0.254		-	-		-	-		-	-	
<i>Secondary Distribution</i>																					
AF				-	-		2	0.200		-	-		-	-		-	-		-	-	
AFR				-	-		-	-		2	0.254		-	-		-	-		-	-	
STAIRCASE TRK (1730-01-601-8086YW)	A		-	-	-	0.146	1	0.146		-	-		-	-		-	-		-	-	
<i>Secondary Distribution</i>																					
AF				-	-		1	0.146		-	-		-	-		-	-		-	-	
TRUCK WRECKER TILT BED (2320-01-380-4755)	A		-	-	-	0.094	1	0.094		-	-		-	-		-	-		-	-	
<i>Secondary Distribution</i>																					
AF				-	-		1	0.094		-	-		-	-		-	-		-	-	
TRUCK WRECKER 44M.4999G (2320-01-130-6353)	A		-	-	-	0.420	2	0.840		-	-		-	-		-	-		-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 3 **P-1 Line Item Number / Title:** 823990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				-	-		2	0.840		-	-		-	-		-	-		-	
TRK RETRIEVER 4X2 (2320-01-454-0723)	A		-	-	-	0.100	1	0.100	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		1	0.100		-	-		-	-		-	-		-	
DEICER TRUCK MTD (1730-00-555-6205YW)	A		-	-	-	0.943	1	0.943	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		1	0.943		-	-		-	-		-	-		-	
LAVATORY SERVICE TRK (1730-00-981-7605YW)	A		-	-	-	-	-	-	-	-	-	-	-	0.109	12	1.311	0.109	12	1.311	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		12	1.311		12	
TRAC ACFT TOW (1740-01-367-9485YW)	A		-	-	-	-	-	-	-	-	-	-	-	0.314	16	5.017	0.314	16	5.017	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		16	5.017		16	
TRK REFRGR 4X2 (2320-00-770-4467)	A		-	-	-	-	-	-	-	-	-	-	-	0.115	4	0.460	0.115	4	0.460	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		4	0.460		4	
TRK HYDRANT FUEL (2320-01-125-2481)	A		-	-	-	-	-	-	-	-	-	-	-	0.211	4	0.844	0.211	4	0.844	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		4	0.844		4	
TRK FUEL AVGAS (2320-01-597-1728)	A		-	-	-	-	-	-	-	-	-	-	-	0.142	10	1.423	0.142	10	1.423	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		10	1.423		10	
Subtotal: Uncategorized			-	-	-	-	-	9.781	-	-	4.662	-	-	4.623	-	-	16.789	-	-	21.412
Total			-	-	-	-	-	9.781	-	-	4.662	-	-	4.623	-	-	16.789	-	-	21.412

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 3	P-1 Line Item Number / Title: 823990 / Items Less Than \$5 Million	Aggregated Items Title: Items Less Than \$5 Million
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Remarks:

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

FY17 unit prices 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).

Footnotes:

⁽¹⁾ FY15 AMC OCO requirement

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 4: Fire Fighting Equipment	P-1 Line Item Number / Title: 824010 / FIRE FIGHTING/CRASH RESCUE VEHICLES
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0202834F, 0901279F
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	10.152	10.419	12.451	48.590	61.041	13.639	14.569	15.644	15.926	-	141.390
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	10.152	10.419	12.451	48.590	61.041	13.639	14.569	15.644	15.926	-	141.390
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	10.152	10.419	12.451	48.590	61.041	13.639	14.569	15.644	15.926	-	141.390

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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.

-- 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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 4: Fire Fighting Equipment		P-1 Line Item Number / Title: 824010 / FIRE FIGHTING/CRASH RESCUE VEHICLES
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	Item MDAP/MAIS Code(s): N/A	
<p>-- 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.</p> <p>-- 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.</p> <p>-- 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 ARRF truck. The truck has a 400 gallon water tank and a 50 gallon foam tank along with a bumper turret and 200 feet of handline all mounted on an F-550 chassis.</p> <p>-- 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.</p> <p>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.</p> <p>The FY17 funding request was reduced by \$152K to account for the availability of prior year execution balances.</p> <p>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.</p> <p>Funding for this exhibit contained in PE 0202834F and 0901279F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 4: Fire Fighting Equipment	P-1 Line Item Number / Title: 824010 / FIRE FIGHTING/CRASH RESCUE VEHICLES
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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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	FIRE FIGHTING/CRASH RESCUE VEHICLES			- / -	- / 10.152	- / 10.419	- / 12.451	- / 48.590	- / 61.041
P-40	Total Gross/Weapon System Cost			- / -	- / 10.152	- / 10.419	- / 12.451	- / 48.590	- / 61.041

*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:
 FY17 funding procures, but is not limited to, 25 vehicles in support of installation and unit mission requirements for Air Force personnel.

 FY17 OCO dollars procure, but is not limited to, 92 vehicles in support of installation and unit mission requirements for the Air Force personnel.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
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				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
TRUCK, AERIAL P-21 4210-01-057-0696	A		-	-	-	-	-	-	913,063.00	1	0.913	-	-	-	-	-	-	-	-	-
TRUCK, PUMPER 4X2 P-22 4210-00-224-4564	A		-	-	-	382,000.00	7	2.674	417,088.00	3	1.251	419,105.00	2	0.838	419,105.00	16	6.706	419,105.00	18	7.544
TRUCK, CRASH P-23 4210-00-702-6801	A		-	-	-	-	-	-	875,216.00	1	0.875	-	-	-	-	-	-	-	-	-
TRUCK, PUMPER 4X4 P-24 4210-00-233-1538	A		-	-	-	397,000.00	4	1.588	449,024.00	2	0.898	451,120.00	3	1.353	451,120.00	17	7.669	451,120.00	20	9.022
TRUCK, WATER TANKER P-26 4210-01-356-4907	A		-	-	-	299,807.00	1	0.300	304,500.00	1	0.305	306,500.00	4	1.226	306,500.00	4	1.226	306,500.00	8	2.452
VEHICLE, MEDIUM RESCUE P-30 4210-01-452-5121	A		-	-	-	-	-	-	-	-	-	255,088.00	1	0.255	-	-	-	255,088.00	1	0.255
TRUCK, QUINT P-33 4210-01-500-1083	A		-	-	-	618,770.00	2	1.237	-	-	-	618,770.00	1	0.619	618,770.00	13	8.044	618,770.00	14	8.663
TRUCK, WILDLAND P-29 4210-01-483-1025	A		-	-	-	-	-	-	338,082.00	2	0.676	340,143.00	1	0.340	-	-	-	340,143.00	1	0.340
TRUCK, HEAVY RESCUE P-28 4210-01-369-6048	A		-	-	-	-	-	-	463,285.00	1	0.463	-	-	-	458,333.00	1	0.458	458,333.00	1	0.458
TRUCK, QUICK ATTACK P-34 4210-01-553-4534	A		-	-	-	-	-	-	-	-	-	203,470.00	1	0.203	-	-	-	203,470.00	1	0.203
TRUCK, HAZMAT FIRE FIGHTING P31 4210-01-396-5219	A		-	-	-	461,000.00	1	0.461	461,000.00	1	0.461	461,292.00	1	0.461	461,292.00	11	5.074	461,292.00	12	5.536
TRUCK, ARFF P19UHP 4210-01-608-7285	A		-	-	-	627,328.00	3	1.882	629,281.00	3	1.888	620,179.00	5	3.101	620,179.00	15	9.303	620,179.00	20	12.404
TRUCK, ARFF P23UHP 4210-01-608-7287	A		-	-	-	667,010.00	3	2.001	670,272.00	4	2.681	674,000.00	6	4.044	674,000.00	15	10.110	674,000.00	21	14.154
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.009	-	-	0.008	-	-	0.010	-	-	-	-	-	0.010
Subtotal: Uncategorized			-	-	-	-	-	10.152	-	-	10.419	-	-	12.451	-	-	48.590	-	-	61.041
Total			-	-	-	-	-	10.152	-	-	10.419	-	-	12.451	-	-	48.590	-	-	61.041

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force		Date: February 2016
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

Remarks:

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

Unit Costs for FY17 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).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 5: Materials Handling Equipment	P-1 Line Item Number / Title: 825990 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	20.239	23.320	18.114	2.366	20.480	10.516	17.193	17.357	17.810	-	126.915
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	20.239	23.320	18.114	2.366	20.480	10.516	17.193	17.357	17.810	-	126.915
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	20.239	23.320	18.114	2.366	20.480	10.516	17.193	17.357	17.810	-	126.915

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY15 funding totals include \$5.131M 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 lifting trucks, sequencing trucks, and other warehouse equipment 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, 0402834F, 0502834F, 0702831F.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	136	148	134	23	157	69	115	118	128
	Total Obligation Authority	20.239	20.505	15.297	2.366	17.663	7.681	13.734	12.667	13.048
AFNG	Quantity	-	-	-	-	-	-	12	9	30
	Total Obligation Authority	-	-	-	-	-	-	0.622	1.817	1.815
AFR	Quantity	-	22	31	-	31	34	21	37	34
	Total Obligation Authority	-	2.815	2.817	-	2.817	2.835	2.837	2.873	2.947
Total: Secondary Distribution	Quantity	136	170	165	23	188	103	148	164	192
	Total Obligation Authority	20.239	23.320	18.114	2.366	20.480	10.516	17.193	17.357	17.810

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 02: Vehicular Equipment / BSA 5: Materials Handling Equipment	P-1 Line Item Number / Title: 825990 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Items Less Than \$5 Million			- / -	- / 20.239	- / 23.320	- / 18.114	- / 2.366	- / 20.480
P-40	Total Gross/Weapon System Cost			- / -	- / 20.239	- / 23.320	- / 18.114	- / 2.366	- / 20.480

*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:
 FY17 funding procures, but is not limited to 149 vehicles in support of installation and unit mission requirements for Air Force personnel.

 FY17 OCO dollars procure, but is not limited to 23 vehicles in support of Overseas Contingency Operations.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 5						P-1 Line Item Number / Title: 825990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
13K AT NUC CERT FORKLIFT 011260457	A		-	-	-	241,149.00	2	0.482	243,175.00	7	1.702	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.482		7	1.702		-	-		-	-		-	
FORKLIFT, 4K ELECTRIC STANDARD 000539175	A		-	-	-	40,260.00	1	0.040	42,257.00	3	0.127	45,800.00	5	0.229	-	-	-	45,800.00	5	0.229
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.040		2	0.085		4	0.183		-	-		4	0.183
AFR			-	-	-		-	-		1	0.042		1	0.046		-	-		1	0.046
FORKLIFT, 2K ELECTRIC STANDARD 006782580	A		-	-	-	-	-	-	-	-	-	31,090.00	2	0.062	-	-	-	31,090.00	2	0.062
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-		2	0.062		-	-		2	0.062
FORKLIFT, 4K DED 010130338	A		-	-	-	42,289.00	4	0.169	43,250.00	8	0.346	44,090.00	12	0.529	-	-	-	44,090.00	12	0.529
<i>Secondary Distribution</i>																				
AF			-	-	-		4	0.169		4	0.173		10	0.441		-	-		10	0.441
AFR			-	-	-		-	-		4	0.173		2	0.088		-	-		2	0.088
FORKLIFT, 4K COMMERCIAL 014330885 (1)	A		-	-	-	40,500.00	2	0.081	41,000.00	6	0.246	42,900.00	11	0.472	-	-	-	42,900.00	11	0.472
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.081		4	0.164		11	0.472		-	-		11	0.472
AFR			-	-	-		-	-		2	0.082		-	-		-	-		-	-
FORKLIFT, 15K COMMERCIAL 010471597	A		-	-	-	-	-	-	80,000.00	2	0.160	87,000.00	4	0.348	-	-	-	87,000.00	4	0.348
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.080		2	0.174		-	-		2	0.174
AFR			-	-	-	-	-	-		1	0.080		2	0.174		-	-		2	0.174
FORKLIFT, 6K RT 008792157	A		-	-	-	-	-	-	-	-	-	123,800.00	1	0.124	-	-	-	123,800.00	1	0.124
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-		1	0.124		-	-		1	0.124

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 5						P-1 Line Item Number / Title: 825990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
TRUCK MOUNTED CONVEYOR BELT 000195630	A		-	-	-	-	-	-	-	-	57,394.00	3	0.172	57,394.00	7	0.402	57,394.00	10	0.574	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-		2	0.115		7	0.402		9	0.517	
AFR			-	-	-	-	-	-	-	-		1	0.057		-	-		1	0.057	
TRUCK, FORKLIFT NARROW AISLE 6K 014214083	A		-	-	-	-	-	-	-	143,000.00	1	0.143	-	-	-	-	143,000.00	1	0.143	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-		1	0.143		-	-		1	0.143	
FORKLIFT, 6K DED 010525219	A		-	-	-	47,243.00	9	0.425	49,411.00	35	1.729	51,920.00	16	0.831	51,920.00	5	0.260	51,920.00	21	1.090
<i>Secondary Distribution</i>																				
AF			-	-	-		9	0.425		35	1.729		16	0.831		5	0.260		21	1.090
4K AT 23.5FT RT BOOM FL 012104756	A		-	-	-	-	-	-	-	-	120,770.00	2	0.242	-	-	-	120,770.00	2	0.242	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-		2	0.242		-	-		2	0.242	
6K FORKLIFT COMMERCIAL 014330887	A		-	-	-	40,496.00	3	0.121	41,352.00	9	0.372	42,490.00	15	0.637	-	-	42,490.00	15	0.637	
<i>Secondary Distribution</i>																				
AF			-	-	-		3	0.121		9	0.372		12	0.510		-	-		12	0.510
AFR			-	-	-	-	-	-	-	-		3	0.127		-	-		3	0.127	
FAT 10K FORKLIFT AT 004889695	A		-	-	-	206,000.00	10	2.060	208,762.00	21	4.384	209,940.00	17	3.569	209,940.00	6	1.260	209,940.00	23	4.829
<i>Secondary Distribution</i>																				
AF			-	-	-		10	2.060		11	2.296		13	2.729		6	1.260		19	3.989
AFR			-	-	-	-	-	-	-	10	2.088		4	0.840		-	-		4	0.840
10K STANDARD FORKLIFT 008566897	A		-	-	-	84,625.00	27	2.285	87,417.00	12	1.049	89,000.00	44	3.916	89,000.00	5	0.445	89,000.00	49	4.361
<i>Secondary Distribution</i>																				
AF			-	-	-		27	2.285		8	0.699		29	2.581		5	0.445		34	3.026
AFR			-	-	-	-	-	-	-	4	0.350		15	1.335		-	-		15	1.335
3K ELECTRIC FORKLIFT 011022185	A		-	-	-	-	-	-	-	-	24,800.00	1	0.025	-	-	-	24,800.00	1	0.025	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-		1	0.025		-	-		1	0.025	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 5					P-1 Line Item Number / Title: 825990 / Items Less Than \$5 Million										Aggregated Items Title: Items Less Than \$5 Million					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
6K ELECTRIC F/L 010471157	A		-	-	-	-	-	-	-	-	-	40,930.00	1	0.041	-	-	-	40,930.00	1	0.041
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	1	0.041	-	-	-	-	1	0.041
10K 55' REACH TELEHANDLER 015769312 (2)	A		-	-	-	194,301.00	74	14.378	196,662.00	67	13.176	198,390.00	8	1.587	-	-	-	198,390.00	8	1.587
<i>Secondary Distribution</i>																				
AF			-	-	-	-	74	14.378	-	67	13.176	-	8	1.587	-	-	-	-	8	1.587
4K WHSE TRAC 010070115	A		-	-	-	48,127.00	4	0.193	-	-	-	49,750.00	8	0.398	-	-	-	49,750.00	8	0.398
<i>Secondary Distribution</i>																				
AF			-	-	-	-	4	0.193	-	-	-	-	5	0.249	-	-	-	-	5	0.249
AFR			-	-	-	-	-	-	-	-	-	-	3	0.149	-	-	-	-	3	0.149
TRK CNTR LIFT SIDELOAD 012280190	A		-	-	-	-	-	-	-	-	-	466,500.00	4	1.866	-	-	-	466,500.00	4	1.866
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	4	1.866	-	-	-	-	4	1.866
20K DED F/L 010396763	A		-	-	-	-	-	-	-	-	-	155,000.00	1	0.155	-	-	-	155,000.00	1	0.155
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	1	0.155	-	-	-	-	1	0.155
3K ELECTRIC 011028903	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRK FL 22000 DED 012203657	A		-	-	-	-	-	-	-	-	-	178,000.00	1	0.178	-	-	-	178,000.00	1	0.178
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	1	0.178	-	-	-	-	1	0.178
TRK F/L 50000 ATCNTR 013073658	A		-	-	-	-	-	-	-	-	-	740,630.00	2	1.481	-	-	-	740,630.00	2	1.481
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	2	1.481	-	-	-	-	2	1.481
25K FORKLIFT 013904562	A		-	-	-	-	-	-	-	-	-	215,730.00	5	1.079	-	-	-	215,730.00	5	1.079
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	5	1.079	-	-	-	-	5	1.079
TRK F/L 2K COMM 014555463	A		-	-	-	-	-	-	-	-	-	29,500.00	1	0.030	-	-	-	29,500.00	1	0.030
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	1	0.030	-	-	-	-	1	0.030

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 5 **P-1 Line Item Number / Title:** 825990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
TRK F/L ELEC SEATED 3K 014981187	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TRK F/L 12K ELEC 015027497	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.004	-	-	0.028	-	-	0.001	-	-	-	-	0.001	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.004	-	-	0.028	-	-	0.001	-	-	-	-	0.001	
Subtotal: Uncategorized			-	-	-	-	-	20.239	-	-	23.320	-	-	18.114	-	-	2.366	-	20.480	
Total			-	-	-	-	-	20.239	-	-	23.320	-	-	18.114	-	-	2.366	-	20.480	

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 cost for FY17 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) FY15 OCO \$.061M
(2) FY15 OCO \$5.070M

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 826210 / Runway Snow Remov & Cleaning Equip
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	11.946	6.215	2.310	6.468	8.778	3.792	2.976	2.970	3.024	-	39.701
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	11.946	6.215	2.310	6.468	8.778	3.792	2.976	2.970	3.024	-	39.701
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	11.946	6.215	2.310	6.468	8.778	3.792	2.976	2.970	3.024	-	39.701

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY15 funding totals include \$1.734M in Overseas Contingency Operations.

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, 0402834F, 0502834F, 0502844F, 0702831F.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	48	31	6	38	44	10	6	6
	Total Obligation Authority	9.754	5.339	1.896	6.468	8.364	3.372	2.548	2.535
AFNG	Quantity	6	5	2	-	2	2	2	2
	Total Obligation Authority	1.888	0.730	0.340	-	0.340	0.359	0.365	0.371
AFR	Quantity	2	2	1	-	1	1	1	1
	Total Obligation Authority	0.304	0.146	0.074	-	0.074	0.061	0.063	0.064

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 826210 / Runway Snow Remov & Cleaning Equip
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Total:	Quantity	56	38	9	38	47	13	9	9	9
Secondary Distribution	Total Obligation Authority	11.946	6.215	2.310	6.468	8.778	3.792	2.976	2.970	3.024

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
826210 / Runway Snow Remov & Cleaning Equip

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Runway Snow Remov & Cleaning Equip			- / -	- / 11.946	- / 6.215	- / 2.310	- / 6.468	- / 8.778
P-40	Total Gross/Weapon System Cost			- / -	- / 11.946	- / 6.215	- / 2.310	- / 6.468	- / 8.778

*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:
 FY17 funding procures, but is not limited to, 9 vehicles in support of installation and unit mission requirements for Air Force Personnel.
 FY17 OCO funding procures, but is not limited to, 38 vehicles in support of Overseas contingency operations.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6						P-1 Line Item Number / Title: 826210 / Runway Snow Remov & Cleaning Equip						Aggregated Items Title: Runway Snow Remov & Cleaning Equip								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CLEANER, VAC MULTIPURPOSE (2438) ⁽¹⁾	A		-	-	-	152,000.00	26	3.952	164,131.00	28	4.596	170,000.00	2	0.340	170,000.00	20	3.400	170,000.00	22	3.740
<i>Secondary Distribution</i>																				
AF			-	-	-		23	3.496		24	3.939		-	-		20	3.400		20	3.400
AFNG			-	-	-		1	0.152		4	0.657		2	0.340		-	-		2	0.340
AFR			-	-	-		2	0.304		-	-		-	-		-	-		-	-
RAPID RUNWAY REPAIR DIRT SWEEPER (1997) ⁽²⁾	A		-	-	-	72,000.00	13	0.936	73,233.00	5	0.366	74,071.00	2	0.148	74,071.00	10	0.741	74,071.00	12	0.889
<i>Secondary Distribution</i>																				
AF			-	-	-		12	0.864		2	0.146		1	0.074		10	0.741		11	0.815
AFNG			-	-	-		1	0.072		1	0.073		-	-		-	-		-	-
AFR			-	-	-		-	-		2	0.146		1	0.074		-	-		1	0.074
54K PLOW (7657)	A		-	-	-	307,000.00	1	0.307	310,720.00	1	0.311	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.307		1	0.311		-	-		-	-		-	-
DUMP W/SNOW PLOW (3963)	A		-	-	-	194,000.00	2	0.388	195,000.00	1	0.195	-	-	-	215,830.00	6	1.295	215,830.00	6	1.295
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.194		1	0.195		-	-		6	1.295		6	1.295
AFNG			-	-	-		1	0.194		-	-		-	-		-	-		-	-
SNOW BROOM AND BLOWER (3770)	A		-	-	-	435,000.00	2	0.870	-	-	-	516,154.00	1	0.516	516,154.00	2	1.032	516,154.00	3	1.548
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.870		-	-		1	0.516		2	1.032		3	1.548
SNOW REMOVAL UNIT 3K TON PER HOUR (5554)	A		-	-	-	490,000.00	9	4.410	-	-	-	522,184.00	1	0.522	-	-	-	522,184.00	1	0.522
<i>Secondary Distribution</i>																				
AF			-	-	-		6	2.940		-	-		1	0.522		-	-		1	0.522
AFNG			-	-	-		3	1.470		-	-		-	-		-	-		-	-
45K REVERSIBLE PLOW (1944) ⁽³⁾	A		-	-	-	357,000.00	3	1.071	372,663.00	2	0.745	390,006.00	2	0.780	-	-	-	390,006.00	2	0.780
<i>Secondary Distribution</i>																				
AF			-	-	-		3	1.071		2	0.745		2	0.780		-	-		2	0.780
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.012	2,000.00	1	0.002	4,000.00	1	0.004	-	-	-	4,000.00	1	0.004

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6	P-1 Line Item Number / Title: 826210 / Runway Snow Remov & Cleaning Equip	Aggregated Items Title: Runway Snow Remov & Cleaning Equip
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF			-	-	-	-	0.012		1	0.002		1	0.004		-	-		1	0.004	
Subtotal: Uncategorized			-	-	-	-	11.946	-	-	6.215	-	-	2.310	-	-	6.468	-	-	8.778	
Total			-	-	-	-	11.946	-	-	6.215	-	-	2.310	-	-	6.468	-	-	8.778	

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 FY17 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).

Footnotes:

- (1) FY15 OCO Airfield Damage Repair
- (2) FY15 OCO Airfield Damage Repair
- (3) FY15 OCO AMC

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	57.069	87.781	46.868	9.271	56.139	60.982	60.636	61.029	62.076	-	445.712
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	57.069	87.781	46.868	9.271	56.139	60.982	60.636	61.029	62.076	-	445.712
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	57.069	87.781	46.868	9.271	56.139	60.982	60.636	61.029	62.076	-	445.712

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY15 funding totals include \$22.0M appropriated for Overseas Contingency Operations.

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, 0208028F, 0401221F, 0502834F, 0502844F, 0702831F.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	
AF	Quantity	399	515	237	77	314	352	399	396	399
	Total Obligation Authority	57.069	85.441	44.137	9.271	53.408	58.250	57.937	58.275	59.275
AFNG	Quantity	-	8	9	-	9	25	24	13	11
	Total Obligation Authority	-	2.060	2.404	-	2.404	2.404	2.378	2.424	2.462
AFR	Quantity	-	5	6	-	6	4	3	5	5
	Total Obligation Authority	-	0.281	0.327	-	0.327	0.328	0.321	0.329	0.339
Total:	Quantity	399	528	252	77	329	381	426	414	415

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Secondary Distribution	Total Obligation Authority	57.069	87.781	46.868	9.271	56.139	60.982	60.636	61.029	62.076

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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 / 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:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Items Less Than \$5 Million			- / -	- / 57.069	- / 87.781	- / 46.868	- / 9.271	- / 56.139
P-40	Total Gross/Weapon System Cost			- / -	- / 57.069	- / 87.781	- / 46.868	- / 9.271	- / 56.139

*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:
 FY17 funding procures, but is not limited to 252 vehicles in support of installation and unit mission requirements for Air Force personnel.

 FY17 OCO funding procures, but is not limited to 77 vehicles in support of Overseas Contingency Operations.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6 **P-1 Line Item Number / Title:** 826990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
DUMP TRUCK, 6X4, 64K GVW (2320-01-524-6043)	A		-	-	-	161,683.00	1	0.162	163,600.00	1	0.164	163,683.00	2	0.327	-	-	-	163,683.00	2	0.327
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.162		1	0.164		2	0.327		-	-		2	0.327
BATCHING PLANT (3895-01-063-2722)	A		-	-	-	1,522K	1	1.522	1,522K	1	1.522	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		1	1.522		1	1.522		-	-		-	-		-	-
TRNHR FRA MTD (3805-01-068-4303)	A		-	-	-	155,656.00	1	0.156	156,600.00	1	0.157	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.156		1	0.157		-	-		-	-		-	-
TRENCHER 45HP (3805-01-395-2699)	A		-	-	-	116,612.00	1	0.117	120,600.00	1	0.121	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.117		1	0.121		-	-		-	-		-	-
MKR TRAFFIC (3825-00-542-2515)	A		-	-	-	310,000.00	1	0.310	-	-	-	310,000.00	1	0.310	-	-	-	310,000.00	1	0.310
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.310		-	-		1	0.310		-	-		1	0.310
TRK PIPE SEWER CLNR (2320-00-196-0811)	A		-	-	-	225,736.00	1	0.226	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.226		-	-		-	-		-	-		-	-
TRAC WHLD IND 4WD (2420-01-205-8579)	A		-	-	-	48,990.00	3	0.147	53,300.00	5	0.267	53,312.00	4	0.213	-	-	-	53,312.00	4	0.213
<i>Secondary Distribution</i>																				
AF			-	-	-		3	0.147		5	0.267		4	0.213		-	-		4	0.213
TRAC FTRACD SZT4 (2410-00-166-4176)	A		-	-	-	118,239.00	1	0.118	-	-	-	118,239.00	1	0.118	-	-	-	118,239.00	1	0.118
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.118		-	-		1	0.118		-	-		1	0.118
25T R TERRAIN (3810-01-479-9745)	A		-	-	-	375,000.00	1	0.375	375,000.00	2	0.750	375,000.00	7	2.625	-	-	-	375,000.00	7	2.625
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.375		2	0.750		7	2.625		-	-		7	2.625

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6					P-1 Line Item Number / Title: 826990 / Items Less Than \$5 Million					Aggregated Items Title: Items Less Than \$5 Million										
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
FRONT HOIST REF TRK (2320-01-470-6102)	A		-	-	-	208,124.00	1	0.208	-	-	-	208,124.00	1	0.208	-	-	-	208,124.00	1	0.208
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.208		-	-		1	0.208		-	-		1	0.208
SCOOP LOADER (3805-00-260-1967)	A		-	-	-	135,225.00	1	0.135	148,500.00	2	0.297	148,527.00	3	0.446	-	-	-	148,527.00	3	0.446
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.135		2	0.297		3	0.446		-	-		3	0.446
TRK DP 24000-33000G 4X2 (2320-00-833-6117)	A		-	-	-	79,917.00	5	0.400	81,500.00	3	0.245	81,599.00	6	0.490	-	-	-	81,599.00	6	0.490
<i>Secondary Distribution</i>																				
AF			-	-	-		5	0.400		2	0.163		6	0.490		-	-		6	0.490
AFNG			-	-	-		-	-		1	0.082		-	-		-	-		-	-
8.5T CRANE (3810-01-538-4647)	A		-	-	-	140,974.00	1	0.141	-	-	-	145,974.00	1	0.146	-	-	-	145,974.00	1	0.146
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.141		-	-		1	0.146		-	-		1	0.146
CARRIER CARGO 4PAX (2350-01-615-0415)	A		-	-	-	164,760.00	1	0.165	-	-	-	164,760.00	1	0.165	-	-	-	164,760.00	1	0.165
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.165		-	-		1	0.165		-	-		1	0.165
DUMP TRK W/ SNOWPLOW (2320-01-206-9156)	A		-	-	-	136,568.00	1	0.137	-	-	-	136,568.00	1	0.137	-	-	-	136,568.00	1	0.137
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.137		-	-		1	0.137		-	-		1	0.137
5 TON DUMP TRUCK (2320-00-706-5348)	A		-	-	-	107,531.00	4	0.430	107,530.00	1	0.108	107,531.00	1	0.108	-	-	-	107,531.00	1	0.108
<i>Secondary Distribution</i>																				
AF			-	-	-		4	0.430		-	-		-	-		-	-		-	-
AFNG			-	-	-		-	-		1	0.108		-	-		-	-		-	-
AFR			-	-	-		-	-		-	-		1	0.108		-	-		1	0.108
2.5 CY SCOOP LOADER FT (3805-00-728-9718)	A		-	-	-	251,022.00	1	0.251	251,000.00	3	0.753	251,022.00	1	0.251	-	-	-	251,022.00	1	0.251
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.251		3	0.753		1	0.251		-	-		1	0.251
EXCAVATOR DIESEL ENGINE DRIVEN PT	A		-	-	-	257,373.00	23	5.920	229,840.00	27	6.206	239,849.00	8	1.919	239,848.00	19	4.557	239,848.30	27	6.476

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6						P-1 Line Item Number / Title: 826990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
(3805-01-106-7176) (1)																				
<i>Secondary Distribution</i>																				
AF				-	-		23	5.920		27	6.206		8	1.919		19	4.557		27	6.476
WHEELED DITCHING MACHINE (3805-01-032-9974)	A		-	-	-	-	-	-	-	-	-	143,838.00	6	0.863	-	-	-	143,838.00	6	0.863
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		6	0.863		-	-		6	0.863
1.5 CY SCOOP LDR W/Q CPLR (3805-01-074-8111)	A		-	-	-	117,220.00	1	0.117	125,320.00	1	0.125	125,326.00	3	0.376	-	-	-	125,326.00	3	0.376
<i>Secondary Distribution</i>																				
AF				-	-		1	0.117		1	0.125		3	0.376		-	-		3	0.376
4 CY SCOOP LDR PT (3805-01-075-1816) (2)	A		-	-	-	228,930.00	28	6.410	228,930.00	23	5.265	228,930.00	5	1.145	-	-	-	228,930.00	5	1.145
<i>Secondary Distribution</i>																				
AF				-	-		28	6.410		23	5.265		5	1.145		-	-		5	1.145
SCOOP LDR W/BKHOE (3805-00-148-2169)	A		-	-	-	80,952.00	1	0.081	82,952.00	4	0.332	82,952.00	10	0.830	-	-	-	82,952.00	10	0.830
<i>Secondary Distribution</i>																				
AF				-	-		1	0.081		3	0.249		10	0.830		-	-		10	0.830
AFNG				-	-		-	-		1	0.083		-	-		-	-		-	-
SCOOP LOADER, SKID STEER 1CY (3805-01-257-5636)	A		-	-	-	46,594.00	1	0.047	119,172.00	4	0.477	119,172.00	4	0.477	-	-	-	119,172.00	4	0.477
<i>Secondary Distribution</i>																				
AF				-	-		1	0.047		4	0.477		4	0.477		-	-		4	0.477
DISTR BIT TRK MTD (3895-00-352-8105)	A		-	-	-	-	-	-	153,987.00	1	0.154	153,987.00	1	0.154	-	-	-	153,987.00	1	0.154
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.154		1	0.154		-	-		1	0.154
PAVING MACH BITU (3895-01-057-5288)	A		-	-	-	-	-	-	327,568.00	3	0.983	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		2	0.655		-	-		-	-		-	-
AFNG				-	-		-	-		1	0.328		-	-		-	-		-	-
ROLLER MOT PT SP 15T (3895-00-078-5898)	A		-	-	-	72,450.00	7	0.507	86,722.00	23	1.995	86,722.00	4	0.347	-	-	-	86,722.00	4	0.347

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6						P-1 Line Item Number / Title: 826990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million									
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
<i>Secondary Distribution</i>																					
AF				-	-		7	0.507		23	1.995		4	0.347		-	-		4	0.347	
RLR RD MTZ TANDEM (3895-00-243-6797)	A		-	-	-	-	-	-	-	-	-	33,417.00	1	0.033	-	-	-	-	33,417.00	1	0.033
<i>Secondary Distribution</i>																					
AF				-	-		-	-		-	-		1	0.033		-	-		1	0.033	
RLR VIB TYPE II (3895-01-071-5625)	A		-	-	-	111,261.00	10	1.113	148,129.00	7	1.037	148,129.00	29	4.296	-	-	-	-	148,129.00	29	4.296
<i>Secondary Distribution</i>																					
AF				-	-		10	1.113		7	1.037		28	4.148		-	-		28	4.148	
AFNG				-	-		-	-		-	-		1	0.148		-	-		1	0.148	
1500G WATER DISTR (3825-00-554-1808)	A		-	-	-	129,671.00	28	3.631	190,920.00	23	4.391	190,920.00	4	0.764	-	-	-	-	190,920.00	4	0.764
<i>Secondary Distribution</i>																					
AF				-	-		28	3.631		23	4.391		4	0.764		-	-		4	0.764	
TRAC IND IW-70 (2420-00-113-8984)	A		-	-	-	43,586.00	2	0.087	48,346.00	6	0.290	48,269.00	17	0.821	-	-	-	-	48,269.00	17	0.821
<i>Secondary Distribution</i>																					
AF				-	-		2	0.087		4	0.193		14	0.676		-	-		14	0.676	
AFR				-	-		-	-		2	0.097		3	0.145		-	-		3	0.145	
DOZER T7 (2410-00-756-1161)	A		-	-	-	269,697.00	2	0.539	281,399.00	2	0.563	281,399.00	4	1.126	-	-	-	-	281,399.00	4	1.126
<i>Secondary Distribution</i>																					
AF				-	-		2	0.539		2	0.563		3	0.844		-	-		3	0.844	
AFNG				-	-		-	-		-	-		1	0.281		-	-		1	0.281	
GRADER, SIZE V, TYPE III (3805-01-337-4624)	A		-	-	-	-	-	-	311,615.00	6	1.870	311,615.00	4	1.246	-	-	-	-	311,615.00	4	1.246
<i>Secondary Distribution</i>																					
AF				-	-		-	-		6	1.870		4	1.246		-	-		4	1.246	
TRACTOR, WHLD IND. (2420-01-536-8542)	A		-	-	-	143,866.00	1	0.144	143,866.00	1	0.144	143,866.00	1	0.144	-	-	-	-	143,866.00	1	0.144
<i>Secondary Distribution</i>																					
AF				-	-		1	0.144		1	0.144		1	0.144		-	-		1	0.144	
SEWER TRK TANDEM AXLE (2320-01-500-5501)	A		-	-	-	-	-	-	289,769.00	1	0.290	299,769.00	1	0.300	-	-	-	-	299,769.00	1	0.300
<i>Secondary Distribution</i>																					

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6						P-1 Line Item Number / Title: 826990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
AF				-	-		-	-		1	0.290		1	0.300		-	-		1	0.300
WATER WAGON (3825-01-539-6813)	A		-	-	-	-	-	-	-	-	-	109,407.00	1	0.109	-	-	-	109,407.00	1	0.109
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		1	0.109		-	-		1	0.109
TLR DITCHING MACH (2330-01-079-4053)	A		-	-	-	17,565.00	10	0.176	29,456.00	13	0.383	30,000.00	6	0.180	-	-	-	30,000.00	6	0.180
<i>Secondary Distribution</i>																				
AF				-	-		10	0.176		13	0.383		5	0.150		-	-		5	0.150
AFR				-	-		-	-		-	-		1	0.030		-	-		1	0.030
CR HYD TRK 100-150T (3810-01-259-9992)	A		-	-	-	-	-	-	968,353.00	1	0.968	968,353.00	1	0.968	-	-	-	968,353.00	1	0.968
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.968		1	0.968		-	-		1	0.968
GRADER, SZ 6 (3805-01-373-5314)	A		-	-	-	187,412.00	2	0.375	200,855.00	1	0.201	200,855.00	1	0.201	-	-	-	200,855.00	1	0.201
<i>Secondary Distribution</i>																				
AF				-	-		2	0.375		1	0.201		1	0.201		-	-		1	0.201
7.5 T CRANE (3810-01-106-3991)	A		-	-	-	-	-	-	375,805.00	1	0.376	375,805.00	1	0.376	-	-	-	375,805.00	1	0.376
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.376		1	0.376		-	-		1	0.376
GRADER SZ 7 (3805-01-375-1906)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TLR MANHOLE CLNR (2330-00-307-3295)	A		-	-	-	-	-	-	54,821.00	3	0.164	54,821.00	2	0.110	-	-	-	54,821.00	2	0.110
<i>Secondary Distribution</i>																				
AF				-	-		-	-		3	0.164		2	0.110		-	-		2	0.110
TRUCK, DUMP (2320-01-344-9282)	A		-	-	-	131,481.00	38	4.996	143,753.00	33	4.744	143,753.00	16	2.300	-	-	-	143,753.00	16	2.300
<i>Secondary Distribution</i>																				
AF				-	-		38	4.996		33	4.744		16	2.300		-	-		16	2.300
COMPACTOR TRACK LOADER (3805-01-603-8653)	A		-	-	-	102,651.00	101	10.368	148,066.00	100	14.807	148,066.00	20	2.961	-	-	-	148,066.00	20	2.961
<i>Secondary Distribution</i>																				
AF				-	-		101	10.368		100	14.807		20	2.961		-	-		20	2.961
DRIER-MXR, BIT CONCR	A		-	-	-	188,621.00	47	8.865	253,553.00	40	10.142	253,553.00	8	2.028	-	-	-	253,553.00	8	2.028

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6					P-1 Line Item Number / Title: 826990 / Items Less Than \$5 Million										Aggregated Items Title: Items Less Than \$5 Million					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
(3895-01-624-1958) (3)																				
<i>Secondary Distribution</i>																				
AF				-	-		47	8.865		40	10.142		8	2.028		-	-		8	2.028
2000 GAL WATER TANK (3825-01-624-1963)	A		-	-	-	68,329.00	44	3.006	82,489.00	91	7.506	82,489.00	8	0.660	82,489.00	56	4.619	82,489.00	64	5.279
<i>Secondary Distribution</i>																				
AF				-	-		44	3.006		91	7.506		8	0.660		56	4.619		64	5.279
MIXER, BITUMINOUS MA (3895-01-627-1341)	A		-	-	-	210,560.00	27	5.685	358,820.00	8	2.871	358,820.00	2	0.718	-	-	-	358,820.00	2	0.718
<i>Secondary Distribution</i>																				
AF				-	-		27	5.685		8	2.871		2	0.718		-	-		2	0.718
T11 DOZER (2410-00-731-7872)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MIXER CON TRLR MTD (3895-01-005-5422)	A		-	-	-	-	-	-	224,903.00	7	1.574	224,903.00	1	0.225	-	-	-	224,903.00	1	0.225
<i>Secondary Distribution</i>																				
AF				-	-		-	-		7	1.574		1	0.225		-	-		1	0.225
COMPACT EXCAVATOR CRAWLER (3805-01-565-8767)	A		-	-	-	-	-	-	55,414.00	6	0.332	55,414.00	2	0.111	-	-	-	55,414.00	2	0.111
<i>Secondary Distribution</i>																				
AF				-	-		-	-		6	0.332		2	0.111		-	-		2	0.111
SCRAPPER MOTORIZED 18CY (3805-00-234-9778)	A		-	-	-	-	-	-	460,833.00	1	0.461	460,833.00	5	2.304	-	-	-	460,833.00	5	2.304
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.461		5	2.304		-	-		5	2.304
CRUSH-SCREEN 150TH (3820-00-060-1841)	A		-	-	-	-	-	-	-	-	-	640,231.00	1	0.640	-	-	-	640,231.00	1	0.640
<i>Secondary Distribution</i>																				
AFNG				-	-		-	-		-	-		1	0.640		-	-		1	0.640
T7 DOZER (2410-00-816-5091)	A		-	-	-	-	-	-	285,399.00	5	1.427	285,399.00	1	0.285	-	-	-	285,399.00	1	0.285
<i>Secondary Distribution</i>																				
AF				-	-		-	-		5	1.427		1	0.285		-	-		1	0.285

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6 **P-1 Line Item Number / Title:** 826990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
CONTRACT MAINT TRK (2320-01-590-4213YW)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SEMI TRAILER DUMP (2330-00-141-5567)	A		-	-	-	-	-	-	42,400.00	2	0.085	42,432.00	1	0.042	-	-	-	42,432.00	1	0.042
<i>Secondary Distribution</i>																				
AF				-	-		-	-		2	0.085		1	0.042		-	-		1	0.042
TRK CNTRN-MAINT 4X2 SZ 5 (2320-01-030-7370)	A		-	-	-	-	-	-	-	-	-	106,167.00	2	0.212	-	-	-	106,167.00	2	0.212
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		1	0.106		-	-		1	0.106
AFNG				-	-		-	-		-	-		1	0.106		-	-		1	0.106
CLNR SEWER JET RODDER (2320-01-372-1823)	A		-	-	-	-	-	-	-	-	-	289,769.00	1	0.290	-	-	-	289,769.00	1	0.290
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		1	0.290		-	-		1	0.290
STLR CG 6000PSI 47700SC (2330-01-112-3836)	A		-	-	-	-	-	-	389,000.00	3	1.167	389,097.00	3	1.167	-	-	-	389,097.00	3	1.167
<i>Secondary Distribution</i>																				
AF				-	-		-	-		3	1.167		3	1.167		-	-		3	1.167
CARR PERS ARMD (2350-00-968-6321)	A		-	-	-	-	-	-	-	-	-	77,714.00	1	0.078	-	-	-	77,714.00	1	0.078
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		1	0.078		-	-		1	0.078
TRAC WHLD W-DOZER (2420-00-540-3881)	A		-	-	-	-	-	-	528,490.00	2	1.057	528,494.00	3	1.585	-	-	-	528,494.00	3	1.585
<i>Secondary Distribution</i>																				
AF				-	-		-	-		2	1.057		3	1.585		-	-		3	1.585
TRACTOR WHLD IND 90HP(2420-01-406-2995)	A		-	-	-	-	-	-	43,260.00	11	0.476	43,265.00	4	0.173	-	-	-	43,265.00	4	0.173
<i>Secondary Distribution</i>																				
AF				-	-		-	-		11	0.476		4	0.173		-	-		4	0.173
LOADER SKID STEER TRACK MTD (3805-00-278-1245)	A		-	-	-	-	-	-	-	-	-	119,172.00	2	0.238	-	-	-	119,172.00	2	0.238
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		2	0.238		-	-		2	0.238

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6						P-1 Line Item Number / Title: 826990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
50 TON CRANE (3810-00-272-9031)	A		-	-	-	-	-	-	624,100.00	1	0.624	624,130.00	2	1.248	-	-	-	624,130.00	2	1.248
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.624		1	0.624		-	-		1	0.624
AFNG			-	-	-	-	-	-					1	0.624		-	-		1	0.624
CR WHLD HYD 15T (3810-00-329-4154)	A		-	-	-	-	-	-	352,400.00	1	0.352	352,418.00	6	2.115	-	-	-	352,418.00	6	2.115
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.352		6	2.115		-	-		6	2.115
CR MSL ENG CHG 8 1-2T (3810-00-827-9352)	A		-	-	-	-	-	-	-	-	-	511,970.00	1	0.512	-	-	-	511,970.00	1	0.512
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		-	-		1	0.512		-	-		1	0.512
CR HYD TRK MTD 60-65T (3810-01-038-8315)	A		-	-	-	-	-	-	695,200.00	1	0.695	695,279.00	1	0.695	-	-	-	695,279.00	1	0.695
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.695		1	0.695		-	-		1	0.695
CRANE HYDRAULIC 15T (3810-01-485-8693)	A		-	-	-	-	-	-	196,300.00	1	0.196	196,330.00	1	0.196	-	-	-	196,330.00	1	0.196
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.196		1	0.196		-	-		1	0.196
CRANE TRK MTD 28 TON (3810-001-506-6637)	A		-	-	-	-	-	-	-	-	-	265,635.00	1	0.266	-	-	-	265,635.00	1	0.266
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		-	-		1	0.266		-	-		1	0.266
DISTR WTR STLR (3825-00-570-3417)	A		-	-	-	-	-	-	121,000.00	3	0.363	121,031.00	1	0.121	-	-	-	121,031.00	1	0.121
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.121		1	0.121		-	-		1	0.121
AFNG			-	-	-	-	-	-		2	0.242		-	-		-	-		-	-
PAVEMENT PROFILER (3895-01-108-3606)	A		-	-	-	-	-	-	-	-	-	357,960.00	5	1.790	-	-	-	357,960.00	5	1.790
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		-	-		5	1.790		-	-		5	1.790
ROLLER MOTORIZED (3895-01-603-8654)	A		-	-	-	-	-	-	40,000.00	7	0.280	40,200.00	2	0.080	-	-	-	40,200.00	2	0.080

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6					P-1 Line Item Number / Title: 826990 / Items Less Than \$5 Million					Aggregated Items Title: Items Less Than \$5 Million										
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				-	-		-	-	5	0.200		2	0.080		-	-		2	0.080	
AFR				-	-		-	-	2	0.080		-	-		-	-		-	-	
DUMP TRUCK 6X4 55K GVW (2320-01-058-5725)	A			-	-		-	-	103,650.00	1	0.104	103,653.00	1	0.104	-	-		103,653.00	1	0.104
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-		-	-		-	-		-	-	
AFNG				-	-		-	-		-	1	0.104			-	-		1	0.104	
AFR				-	-		-	-	1	0.104		-	-		-	-		-	-	
EXCAVATOR CRAWLER MTD (3805-01-058-3562)	A			-	-		-	-	173,900.00	3	0.522	173,914.00	2	0.348	-	-		173,914.00	2	0.348
<i>Secondary Distribution</i>																				
AF				-	-		-	-	3	0.522		1	0.174		-	-		1	0.174	
AFNG				-	-		-	-		-		1	0.174		-	-		1	0.174	
MIXER CONCRETE TM 6-8 CY (3895-00-834-6124)	A			-	-		-	-		-	289,928.00	1	0.290		-	-		289,928.00	1	0.290
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-		-	-		-	-		-	-	
AFNG				-	-		-	-		-		1	0.290		-	-		1	0.290	
CRUSHING PLANT (3820-01-218-0595)	A			-	-		-	-	500,900.00	1	0.501		-	-		-		-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	-	1	0.501		-	-		-	-		-	-	
PAVING (3895-00-190-3313)	A			-	-		-	-	611,300.00	1	0.611		-	-		-		-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	-	1	0.611		-	-		-	-		-	-	
SCRPR RD MTZD 11-12 CY (3805-01-597-5512)	A			-	-		-	-	294,300.00	1	0.294		-	-		-		-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	-	1	0.294		-	-		-	-		-	-	
RLR RD TAND 2RL 2.5T (3895-00-243-6797)	A			-	-		-	-	33,100.00	1	0.033	36,000.00	1	0.036	47,500.00	2	0.095	43,666.67	3	0.131
<i>Secondary Distribution</i>																				
AF				-	-		-	-	1	0.033		-	-		2	0.095		2	0.095	
AFNG				-	-		-	-		-		1	0.036		-	-		1	0.036	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6 **P-1 Line Item Number / Title:** 826990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
EXCAVATOR TRK MTD (3805-00-618-7337)	A		-	-	-	-	-	-	266,000.00	1	0.266	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.266		-	-		-	-		-	-
DIGGER STRAINER TWD (3805-00-202-7377)	A		-	-	-	-	-	-	63,200.00	1	0.063	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AFNG				-	-		-	-		1	0.063		-	-		-	-		-	-
WELL DRLG MACH (3820-00-286-9196)	A		-	-	-	-	-	-	1,155K	1	1.155	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AFNG				-	-		-	-		1	1.155		-	-		-	-		-	-
DRIER MXR BIT-CNRT (3895-00-554-5162)	A		-	-	-	-	-	-	30,400.00	9	0.274	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		9	0.274		-	-		-	-		-	-
COMPACT SHEEPS FOOT (3805-01-359-7626)	A		-	-	-	-	-	-	437,100.00	2	0.874	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		2	0.874		-	-		-	-		-	-
SEWER TRK SINGLE AXLE (2320-01-501-8524)	A		-	-	-	-	-	-	264,000.00	1	0.264	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.264		-	-		-	-		-	-
50T CRANE (3810-01-079-8358)	A		-	-	-	-	-	-	385,000.00	2	0.770	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		2	0.770		-	-		-	-		-	-
WHLD HYD 15T (3810-00-554-4103)	A		-	-	-	-	-	-	624,100.00	1	0.624	657,000.00	1	0.657	-	-	-	657,000.00	1	0.657
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.624		1	0.657		-	-		1	0.657
PAVER CONCRETE SLIP (3895-01-535-4275)	A		-	-	-	-	-	-	399,800.00	1	0.400	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	0.400		-	-		-	-		-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 02 / 6 **P-1 Line Item Number / Title:** 826990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
RUBER REMOVAL TRK (3805-01-592-7853)	A		-	-	-	-	-	-	553,800.00	1	0.554	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.554	-	-	-	-	-	-	-	-	
CARRIER CARGO (2350-01-132-9099)	A		-	-	-	-	-	-	245,900.00	2	0.492	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		2	0.492	-	-	-	-	-	-	-	-	
TAC WHLD MULTI (2420-01-366-6796)	A		-	-	-	-	-	-	28,000.00	3	0.084	45,000.00	1	0.045	-	-	-	45,000.00	1	0.045
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		3	0.084	-	-	-	-	-	-	-	-	
AFR			-	-	-	-	-	-		-	-	1	0.045	-	-	-	-	1	0.045	
TRK WB ACFT LDR 15K (3930-01-132-6891CT)	A		-	-	-	-	-	-	138,500.00	1	0.139	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.139	-	-	-	-	-	-	-	-	
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.004	-	-	0.004	-	-	0.020	-	-	-	-	0.020	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.004	-	-	0.004	-	-	0.020	-	-	-	-	0.020	
Subtotal: Uncategorized			-	-	-	-	-	57.069	-	-	87.781	-	-	46.868	-	-	9.271	-	-	56.139
Total			-	-	-	-	-	57.069	-	-	87.781	-	-	46.868	-	-	9.271	-	-	56.139

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 FY17 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).

- Footnotes:**
- (1) AIRFIELD DAMAGE REPAIR (ADR) FY17 REQUIREMENTS
 - (2) AIRFIELD DAMAGE REPAIR (ADR) FY15 OCO REQUIREMENTS ; ADR OCO: \$17M PLACEHOLDER; FUNDS WERE NOT SENT DOWN FOR PROCUREMENT
 - (3) AIRFIELD DAMAGE REPAIR (ADR) FY15 OCO REQUIREMENTS ; 30 ADR OCO

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec) **P-1 Line Item Number / Title:** 831010 / Comsec Equipment

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	91.987	139.244	72.359	-	72.359	93.613 ^(a)	86.474 ^(b)	70.740 ^(c)	72.138 ^(d)	-	626.555 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	91.987	139.244	72.359	-	72.359	93.613	86.474	70.740	72.138	-	626.555
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	91.987	139.244	72.359	-	72.359	93.613	86.474	70.740	72.138	-	626.555

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 0208088F AF DEFENSIVE CYBERSPACE OPERATIONS

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)

This program funds procurement of PUBLIC KEY INFRASTRUCTURE (PKI). PKI provides identity management (IDM) services to support warfighter requirements. 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-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)		P-1 Line Item Number / Title: 831010 / Comsec Equipment
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	Item MDAP/MAIS Code(s): N/A	
<p>repudiation of those transactions. PKI is one of many security solutions used to protect information and provide attributes to enable access to critical resources in the Global Information Grid (GIG) and is used concurrently with other solutions. Funding supports several different requirement areas to procure infrastructure equipment for the field in support of Secret Internet Protocol Routed Network (SIPRNET), PKI, and Evolutionary PKI End User Equipment.</p> <p>PE 0303140F INFORMATION SYSTEMS SECURITY PROGRAM:</p> <p>This program funds procurement of Communications Security (COMSEC) equipment, ancillary encryption/decryption devices, and related equipment to enable the secure transport of information. 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. 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 cede information that could be used against the United States in a public forum. 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 space, 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.</p> <p>PE 0305251F CYBERSPACE OPS AND FORCE SUPPORT</p> <p>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).</p> <p>Funding for this exhibit contained in PE 0207448F; PE 0208088F; PE 0303135F; PE 0303140F; PE 0305251F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec) **P-1 Line Item Number / Title:** 831010 / Comsec Equipment

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	C2ISR Tactical Data Link			- / 0.000	- / -	- / 2.246	- / -	- / -	- / -
P-5	AF DEFENSIVE CYBERSPACE OPERATIONS		A	- / -	- / 2.882	- / 23.377	- / 22.678	- / -	- / 22.678
P-5	Public Key Infrastructure (PKI)		A	- / -	75,381 / 4.862	35,060 / 2.442	67,240 / 4.005	- / -	67,240 / 4.005
P-5	Information Systems Security Program		A	- / -	- / 84.243	- / 107.551	- / 45.676	- / -	- / 45.676
P-5	Cyberspace Operations Forces and Force Support		A	- / 0.000	- / -	- / 3.628	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 91.987	- / 139.244	- / 72.359	- / -	- / 72.359

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	C2ISR Tactical Data Link			- / -	- / -	- / -	- / -	- / -	- / 2.246
P-5	AF DEFENSIVE CYBERSPACE OPERATIONS		A	- / -	- / -	- / -	- / -	- / -	- / -
P-5	Public Key Infrastructure (PKI)		A	- / -	- / -	- / -	- / -	- / -	- / -
P-5	Information Systems Security Program		A	- / -	- / -	- / -	- / -	- / -	- / -
P-5	Cyberspace Operations Forces and Force Support		A	- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 93.613	- / 86.474	- / 70.740	- / 72.138	- / -	- / 626.555

*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 0207448F C2ISR TACTICAL DATA LINK

1. LINK-16: The funding is required to ensure the platforms are upgraded in time to meet the 2020 FAA mandate for frequency remapping. The radios will include new Crypto Modernization required by NSA to address new re-keying capabilities. Not receiving the funds on time would cause delays and interoperability issues. These platforms must receive the terminal on time as mandated by the FAA/DoD regulation C.JCSI 6510.02E and the NSA, as of 1 APR 14. Funding will be executed in BPAC 834010.

PE 0208088F AF DEFENSIVE CYBERSPACE OPERATIONS

1. COMPUTER SECURITY ASSISTANCE PROGRAM (CSAP) COUNTERMEASURES: FY17 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 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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)		P-1 Line Item Number / Title: 831010 / Comsec Equipment
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	Item MDAP/MAIS Code(s): N/A	
<p>2. AFCERT: FY17 funding provides equipment and modification to the AF Cyber Defense (ACD) weapon systems to increase weapon system utility.</p> <p>3. CYBERSPACE VULNERABILITY ASSESSMENT /HUNTER: FY17 funding provides a full level and an initial level of CVA /Hunter equipment to 12 active duty Cyber Protection Teams and 6 Air National Guard (ANG) CPT units.</p> <p>4. CYBER DEFENSE ANALYSIS: FY17 funding provides equipment for three RF Monitor Systems (Digital Receiver Technology) with extended warranty.</p> <p>PE 0303135F PUBLIC KEY INFRASTRUCTURE (PKI):</p> <p>1. EVOLUTIONARY PKI END USER EQUIPMENT: 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.</p> <p>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 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. FY17 funds will procure hardware, software, and support upgrades.</p> <p>PE 0303140F INFORMATION SYSTEMS SECURITY PROGRAM:</p> <p>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.</p> <p>a. PRODUCTS: FY17 funding moved to APPN 3021 Space Procurement. FY16 funding provides 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.</p> <p>b. LOGISTICS: FY17 funding moved to APPN 3021 Space Procurement. FY16 funding provides 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</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)		P-1 Line Item Number / Title: 831010 / Comsec Equipment
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	Item MDAP/MAIS Code(s): N/A	
<p>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.</p> <p>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 (HAIBE) 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 to comply with NSA's Advance Cryptographic Capabilities (ACC) directives. The program supports space, 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.</p> <p>a. IN-LINE NETWORK ENCRYPTORS: Previously called "Network Encryption Systems." FY17 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 HAIBE Interoperability Specification (HAIBE IS) as well as Internet Protocol Version 6 capability that will improve security and expand the bandwidth of USAF secure Internet Protocol networks.</p> <p>b. LINK ENCRYPTION FAMILY (LEF): FY17 funds provide for the replacement of the legacy LEF with new more secure crypto modernization compliant LEF devices . The LEF provide 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 reprogrammability. NSA has issued classified instructions regarding the use of specific LEF devices.</p> <p>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. FY17 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.</p> <p>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, 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, miniaturized crypto for small unmanned systems, and all future satellite control systems and mission data downlinks. Current programs will replace/upgrade over 30,000 devices out of the Air Force's 245,000+ crypto devices and proved over 100,000 new devices where none were previously available. Other potential 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. FY17 Funding for this effort is in PE 0303140F.</p> <p>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 will conclude in FY15 for the KIV-78 and FY18 for KIV-77 (required to outfit most of the USAF fleet) and a remote form factor for certain C2 AF aircraft:</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)		P-1 Line Item Number / Title: 831010 / Comsec Equipment
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	Item MDAP/MAIS Code(s): N/A	
<p>(1) KIV-77 DEVICES: The FY17 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.</p> <p>(2) KIV-78 DEVICES: The FY16 funding procures 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.</p> <p>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). FY17 funding procures integration of devices with KMI.</p> <p>c. VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM): The VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) program 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 (NC2) and other Top Secret and Secret networks (Devices: KY-57/58,KY-99/100 and USC-43). The VACM Embedded Project upgrades the BBIO module as a permanent modification of the ARC-234.</p> <p>(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 Baseband Input/Output (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.</p> <p>(1a) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) COMPONENTS (ARC-234), Installation: The upgraded BBIOs will be installed/modified into the ARC-234 radios beginning in FY16.</p> <p>(2) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) INTERIM CONTRACTOR SUPPORT (ICS): Logistics is required for the initial period of operation for the VACM device. For the purposes of this contract, ICS includes material management, supply distribution, repair functions for the VACM device, technical manuals revisions and software management and maintenance.</p> <p>(3) 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.</p> <p>d. Missile Electronic Encryption Device (MEED): The MEED Modification will procure the modified 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.</p> <p>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.</p> <p>FY17 Plans:</p> <p>(1) Distributed Common Ground System (DCGS) Crypto: No action planned</p> <p>(2) Classified Data at Rest (CDAR) Crypto: Continued procurement of legacy encryption solutions for application to unprotected legacy Air Force platforms.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)		P-1 Line Item Number / Title: 831010 / Comsec Equipment
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	Item MDAP/MAIS Code(s): N/A	
<p>(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.</p> <p>(4) Integrated Data Denial (IDD) Crypto: No action planned</p> <p>(5) Advanced Crypto Capabilities (ACC): Planned modification activity in support of KG-245A.</p> <p>f. PROGRAM MANAGEMENT ADMINISTRATION (PMA): Program management administration costs support management with engineering and technical expertise in support of development and procurement activities.</p> <p>4. AIR FORCE ELECTRONIC KEY MANAGEMENT SYSTEM (AFEKMS): AFEKMS is a part of the AF Key Management Enterprise (KME), a sustainment program that works in concert with the DoD EKMS Program to provide secure, flexible, and timely upgrades to cryptographic key generation, distribution, and management systems. AFEKMS sustains the current Electronic Key Management System and serves as the bridge to the full operational capability (FOC) of DoD KMI. The Air Force continues to purchase AF EKMS physical products required under the COMSEC Material Control System (CMCS). Funding for this effort is in program element 0303140F.</p> <p>a. TECHNICAL UPDATES: FY17 funding procures hardware and software products necessary to update the Tier 1 Net Key Servers, Tier 3 system data management devices (DMDs); and systems to maintain an audit trail for COMSEC materials.</p> <p>b. KOV-21 CARDS & REFRESH: Funding procured KOV-21 cards, which are the crypto engine for the simple key loader. KOV-21 cards life expectancy is approximately 7-11 years depending on use. Capital Equipment Replacement began in FY10 and will continue until the Air Force Last Mile Load Element is fielded.</p> <p>c. SIMPLE KEY LOADER (SKL) & REFRESH: FY17 funding procures AN/PYQ-10 (C) SKL units which are controlled cryptographic items that are mission essential to help the AF load Crypto key into various platforms. SKLs replace the obsolete AN/CYZ-10 and SKLs that were fielded in prior years (end-of-life due to KOV-21 card). Disruption of the SKL delivery schedule could degrade and/or disrupt secure communications in the battlefield. Capital Equipment Replacement continues incrementally across the FYDP until the Air Force Last Mile Load Element is fielded.</p> <p>5. AIR FORCE KEY MANAGEMENT INFRASTRUCTURE (AF KMI): The Department of Defense (DoD) has directed the replacement of the legacy Air Force Electronic Key Management System (AFEKMS) portion of the AF Key Management Enterprise (KME) with the DoD Key Management Infrastructure (KMI). The Air Force KMI transition activity procures and deploys the DoD KMI training, equipment and software within the AF to provide mission critical Communications Security support for all AF mission and platforms implementing the core capability for the AF's future KME. The AF KMI transition activity procures KMI connectivity, key management and cryptographic unique/certified products to replace legacy AFEKMS equipment per National Security Agency (NSA) mandates and to field KMI-enabled products that have been under previous years DOD development. Funding for this effort is in program element 0303140F.</p> <p>a. KMI Hardware: FY17 funding procures: KMI Management Clients (MGCs)that provide the user interface; Advanced Key Processors (AKPs) that provide the cryptographic capability to interact with the DOD KMI; KG-250 High Assurance Internet Protocol Encryptors (HAIPes) that provide secure connectivity to the KMI; KOV-29 Type 1 Tokens that provide secure user identification/authentication to the KMI; and other peripheral KMI equipment requirements. KMI Last Mile production effort begins to procure Portable Key Loaders (PKLs) and Tactical Key Loaders (TKLs) to replace fielded legacy Simple Key Loaders (SKLs) and Really Simple Key Loaders(RASKL) in the key management enterprise.</p> <p>b. KMI Last Mile Production: Funding procures competitive source selection activities, production planning, annual production lots of Portable Key Loader devices, training and hardware/software support capabilities.</p> <p>PE 0305251F CYBERSPACE OPS FORCES AND FORCE SUPPORT CYBERSPACE VULNERABILITY ASSESSMENT (CVA) TRAINING SUITE: No funding in FY17.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec)		P-1 Line Item Number / Title: 831010 / Comsec Equipment
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	Item MDAP/MAIS Code(s): N/A	

Efforts with funding starting in FY 2018 through FY 2021 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 2018 Cost Delta: 93.613 million
- (b) FY 2019 Cost Delta: 86.474 million
- (c) FY 2020 Cost Delta: 70.740 million
- (d) FY 2021 Cost Delta: 72.138 million
- (e) FY Total Cost Delta: 624.309 million

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1	P-1 Line Item Number / Title: 831010 / Comsec Equipment	Aggregated Modification Items Title: C2ISR Tactical Data Link
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Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
C2ISR1 / C2ISR Tactical Data Link			-	-	-	-	-	-	-	-	2.246	-	-	-	-	-	-	-	-	-
Total			-	-	0.000	-	-	-	-	-	2.246	-	-	-	-	-	-	-	-	-

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
C2ISR1 / C2ISR Tactical Data Link			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.246
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.246

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
C2ISR1 / C2ISR Tactical Data Link	E-3, E-8C, RC-135, AOC	Capability Improvement

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1	P-1 Line Item Number / Title: 831010 / Comsec Equipment	Item Number / Title [DODIC]: - / AF DEFENSIVE CYBERSPACE OPERATIONS

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	2.882	23.377	22.678	-	22.678
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	2.882	23.377	22.678	-	22.678
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	2.882	23.377	22.678	-	22.678

(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 Dollars)	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware - 0208088F COMSEC Cost																		
Recurring Cost																		
Cyberspace Vulnerability Assessment/Hunter	-	-	-	-	-	-	4,604K	4	18.418	4,970K	4	19.878	-	-	-	4,970K	4	19.878
Computer Security Assistance Program (CSAP) Countermeasures	-	-	-	576,400.00	5	2.882	464,000.00	5	2.320	462,800.00	5	2.314	-	-	-	462,800.00	5	2.314
AFCERT Upgrade Sensors	-	-	-	-	-	-	37,000.00	2	0.074	38,500.00	2	0.077	-	-	-	38,500.00	2	0.077
AFCERT Upgrade Switch	-	-	-	-	-	-	44,500.00	2	0.089	44,500.00	2	0.089	-	-	-	44,500.00	2	0.089
AFCERT Virtual Private Network (VPN Module)	-	-	-	-	-	-	38,000.00	2	0.076	38,000.00	2	0.076	-	-	-	38,000.00	2	0.076
Cyberspace Defense Analysis	-	-	-	-	-	-	800,000.00	3	2.400	81,333.33	3	0.244	-	-	-	81,333.33	3	0.244
Subtotal: Recurring Cost	-	-	-	-	-	2.882	-	-	23.377	-	-	22.678	-	-	-	-	-	22.678
Subtotal: Hardware - 0208088F COMSEC Cost	-	-	-	-	-	2.882	-	-	23.377	-	-	22.678	-	-	-	-	-	22.678
Gross/Weapon System Cost	-	-	-	-	-	2.882	-	-	23.377	-	-	22.678	-	-	-	-	-	22.678

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Exhibit P-5, Cost Analysis: PB 2017 Air Force						Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1				P-1 Line Item Number / Title: 831010 / Comsec Equipment			Item Number / Title [DODIC]: - / Public Key Infrastructure (PKI)		
ID Code (A=Service Ready, B=Not Service Ready) : A						MDAP/MAIS Code:			
Resource Summary				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)				-	75,381	35,060	67,240	-	67,240
Gross/Weapon System Cost (<i>\$ in Millions</i>)				-	4.862	2.442	4.005	-	4.005
Less PY Advance Procurement (<i>\$ in Millions</i>)				-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)				-	4.862	2.442	4.005	-	4.005
Plus CY Advance Procurement (<i>\$ in Millions</i>)				-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)				-	4.862	2.442	4.005	-	4.005
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>									
Initial Spares (<i>\$ in Millions</i>)				-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)				-	64.50	69.65	59.56	-	59.56

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware - 0303135F COMSEC Cost																		
Recurring Cost																		
1. EVOLUTIONARY PKI END USER EQUIPMENT	-	-	-	15.00	249,066	3.736	50.00	35,060	1.753	49.58	67,240	3.334	-	-	-	49.58	67,240	3.334
2. AIR FORCE DIRECTORY SERVICES	-	-	-	225,200.00	5	1.126	137,800.00	5	0.689	134,200.00	5	0.671	-	-	-	134,200.00	5	0.671
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	4.862	-	-	2.442	-	-	4.005	-	-	-	-	-	4.005
<i>Subtotal: Hardware - 0303135F COMSEC Cost</i>	-	-	-	-	-	4.862	-	-	2.442	-	-	4.005	-	-	-	-	-	4.005
Gross/Weapon System Cost	-	-	-	64.50	75,381	4.862	69.65	35,060	2.442	59.56	67,240	4.005	-	-	-	59.56	67,240	4.005

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1	P-1 Line Item Number / Title: 831010 / Comsec Equipment	Item Number / Title [DODIC]: - / Information Systems Security Program

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	84.243	107.551	45.676	-	45.676
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	84.243	107.551	45.676	-	45.676
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	84.243	107.551	45.676	-	45.676

(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 Dollars)	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware - 1. SPACE COMSEC (PE 0303140F) Cost																		
Recurring Cost																		
a. PRODUCTS	-	-	14,311.63	860	12.308	17,163.00	1,192	20.458	-	-	-	-	-	-	-	-	-	-
b. LOGISTICS	-	-	651,076.92	13	8.464	2,885K	7	20.194	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	20.772	-	-	40.652	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - 1. SPACE COMSEC (PE 0303140F) Cost</i>	-	-	-	-	20.772	-	-	40.652	-	-	-	-	-	-	-	-	-	-
Hardware - 2. AIR and GROUND COMSEC (PE 0303140F) Cost																		
Recurring Cost																		
a. IN-LINE NETWORK ENCRYPTORS	-	-	16,091.61	1,156	18.602	16,108.45	627	10.100	16,150.88	285	4.603	-	-	-	16,150.88	285	4.603	-
b. LINK ENCRYPTION FAMILY	-	-	8,982.93	103	0.925	9,386.82	698	6.552	-	-	-	-	-	-	-	-	-	-
c. AIR AND GROUND CONSOLIDATED	-	-	2,795.34	2,175	6.080	2,578.98	1,570	4.049	2,864.01	853	2.443	-	-	-	2,864.01	853	2.443	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	25.607	-	-	20.701	-	-	7.046	-	-	-	-	-	-	7.046
<i>Subtotal: Hardware - 2. AIR and GROUND COMSEC (PE 0303140F) Cost</i>	-	-	-	-	25.607	-	-	20.701	-	-	7.046	-	-	-	-	-	-	7.046
Hardware - 3. CRYPTOGRAPHIC MODERNIZATION (PE 0303140F) Cost																		
Recurring Cost																		
a. (1) KIV-77	-	-	-	-	-	13,636.51	641	8.741	30,880.00	25	0.772	-	-	-	30,880.00	25	0.772	-
a. (2) KIV-78	-	-	-	44,545.45	55	2.450	-	-	0.081	-	-	0.083	-	-	-	-	-	0.083

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1						P-1 Line Item Number / Title: 831010 / Comsec Equipment						Item Number / Title [DODIC]: - / 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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
b. (1) REMOTE REKEY (RRK) (CI-33) DEVICES	-	-	-	176,222.22	18	3.172	-	-	1.864	-	-	0.142	-	-	-	-	-	0.142
b. (2) REMOTE REKEY (RRK) (CI-33) INTERIM CONTRACTOR SUPPORT (ICS LABOR)	-	-	-	-	-	0.506	-	-	-	-	-	-	-	-	-	-	-	-
c. (1) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) COMPONENTS (ARC-234)	-	-	-	53,703.39	118	6.337	39,608.85	167	6.615	50,457.64	43	2.170	-	-	-	50,457.64	43	2.170
c. (1a) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) COMPONENTS (ARC-234) INSTALLATION	-	-	-	-	-	-	18,392.86	179	3.292	18,672.62	222	4.145	-	-	-	18,672.62	222	4.145
c. (2) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) INTERIM CONTRACTOR SUPPORT (ICS)	-	-	-	-	-	-	-	-	0.864	-	-	-	-	-	-	-	-	-
c. (3) VINSON/ANDVT CRYPTOGRAPHIC MODERNIZATION (VACM) DEVICES	-	-	-	9,802.44	820	8.038	9,793.25	919	9.000	9,809.66	1,035	10.153	-	-	-	9,809.66	1,035	10.153
d. MISSILE ELECTRONIC ENCRYPTION DEVICES (MEED)	-	-	-	-	-	-	-	-	-	10,750.00	320	3.440	-	-	-	10,750.00	320	3.440
e. PROGRAM MANAGEMENT (PMA)	-	-	-	-	-	2.055	-	-	2.869	-	-	2.564	-	-	-	-	-	2.564
f. DISTRIBUTED GROUND COMM SYSTEM (DCGS)	-	-	-	57,324.84	157	9.000	-	-	-	-	-	-	-	-	-	-	-	-
g. CLASSIFIED DATA AT REST (CDAR)	-	-	-	-	-	-	4,285.71	350	1.500	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1						P-1 Line Item Number / Title: 831010 / Comsec Equipment						Item Number / Title [DODIC]: - / 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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
h. TRUSTED SENSORS	-	-	-	-	-	-	20,270.27	74	1.500	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	31.558	-	-	36.326	-	-	23.469	-	-	-	-	-	23.469
<i>Subtotal: Hardware - 3. CRYPTOGRAPHIC MODERNIZATION (PE 0303140F) Cost</i>	-	-	-	-	-	31.558	-	-	36.326	-	-	23.469	-	-	-	-	-	23.469
Hardware - 4. AF EKMS (PE 0303140F) Cost																		
Recurring Cost																		
a. TECHNICAL UPDATES	-	-	-	-	-	0.914	-	-	0.680	-	-	1.047	-	-	-	-	-	1.047
b. SIMPLE KEY LOADER (SKL) and REFRESH	-	-	-	2,502.02	494	1.236	2,500.00	1,708	4.270	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	2.150	-	-	4.950	-	-	1.047	-	-	-	-	-	1.047
<i>Subtotal: Hardware - 4. AF EKMS (PE 0303140F) Cost</i>	-	-	-	-	-	2.150	-	-	4.950	-	-	1.047	-	-	-	-	-	1.047
Hardware - 5. AF KMI (PE 0303140F) Cost																		
Recurring Cost																		
a. KMI HARDWARE	-	-	-	18,977.17	219	4.156	21,875.56	225	4.922	41,108.43	83	3.412	-	-	-	41,108.43	83	3.412
b. KMI Last Mile Production	-	-	-	-	-	-	-	-	-	3,540.19	3,023	10.702	-	-	-	3,540.19	3,023	10.702
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	4.156	-	-	4.922	-	-	14.114	-	-	-	-	-	14.114
<i>Subtotal: Hardware - 5. AF KMI (PE 0303140F) Cost</i>	-	-	-	-	-	4.156	-	-	4.922	-	-	14.114	-	-	-	-	-	14.114
Gross/Weapon System Cost	-	-	-	-	-	84.243	-	-	107.551	-	-	45.676	-	-	-	-	-	45.676

Remarks:

b. (1) Identification Friend or Foe (IFF) KIV-77 & KIV-78 Devices - Change in Total Cost per fiscal year was due to forward funding of requirements; Average Unit Cost is approximately \$14K for the KIV-77 and \$19K for the KIV-78.

c.(1) Remote Rekey (RRK) (CI-33) Devices - Change in Total Cost per fiscal year was due to forward funding of requirements; Average Unit Cost is approximately \$110K; Quantities are Sites.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1	P-1 Line Item Number / Title: 831010 / Comsec Equipment	Item Number / Title [DODIC]: - / Cyberspace Operations Forces and Force Support

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	3.628	-	-	-
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	3.628	-	-	-
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	3.628	-	-	-

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware - 0305251F Cost																		
Recurring Cost																		
Cyber Vulnerability Assessment/Hunter (CVA/H) Training System	-	-	0.000	-	-	-	3,628K	1	3.628	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	0.000	-	-	-	-	-	3.628	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - 0305251F Cost</i>	-	-	0.000	-	-	-	-	-	3.628	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	0.000	-	-	-	-	-	3.628	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec) **P-1 Line Item Number / Title:**
 831970 / Modifications (COMSEC)

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	1.363	0.677	-	-	-	-	-	-	-	-	2.040
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	1.363	0.677	-	-	-	-	-	-	-	-	2.040
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	1.363	0.677	-	-	-	-	-	-	-	-	2.040

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 1: Comm Security Equipment(Comsec) **P-1 Line Item Number / Title:** 831970 / Modifications (COMSEC)

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Modifications (COMSEC)			- / -	- / 1.363	- / 0.677	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 1.363	- / 0.677	- / -	- / -	- / -

*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:

FY17 funding provides 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.

FY17-specific modifications include upgrades to new KS-252 crypto modernization product. The KS-252 is next generation command control encryption and telemetry decryption product enabled with 5 algorithms used in satellite ground control stations. Current delivered units have an inadvertent timer rollover event which results in the unit resting every 49 days with impacts to satellite operations. There are also classified "features" that need to be fixed and the product re-certified by NSA.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 1	P-1 Line Item Number / Title: 831970 / Modifications (COMSEC)	Aggregated Items Title: Modifications (COMSEC)
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
SPACE COMSEC																				
1. SPACE COMSEC	A		-	-	-	-	-	1.363	-	-	0.677	-	-	-	-	-	-	-	-	-
Subtotal: SPACE COMSEC			-	-	-	-	-	1.363	-	-	0.677	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	1.363	-	-	0.677	-	-	-	-	-	-	-	-	-

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

Remarks:

Modification funds are used to update both cryptographic product end items and logistics lifecycle support elements.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
 832060 / Intelligence Training 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	2.832	4.041	6.982	-	6.982	5.836	5.476	5.572	5.673	-	36.412
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	2.832	4.041	6.982	-	6.982	5.836	5.476	5.572	5.673	-	36.412
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	2.832	4.041	6.982	-	6.982	5.836	5.476	5.572	5.673	-	36.412

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The FY17 funding request was reduced by \$1.122M to account for the availability of prior year execution balances.

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 support functional training on the newest generation of intelligence systems with an emphasis on computer-based training systems through modeling and simulation. This equipment is essential for preparing military intelligence personnel to support warfighting commanders. The equipment supports intelligence training for Air Force (AF) personnel and members of all Department of Defense (DoD) services 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 provide ground-based training system (GBTS) and support the development of the enterprise architecture, which consolidates multiple networks and systems into an integrated GITA.

The FY17 funding request includes an increase to account for additional Air Force requirements.

Funding for this exhibit contained in PE 0804733F.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 832060 / Intelligence Training 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Intelligence Training Equipment			- / -	- / 2.832	- / 4.041	- / 6.982	- / -	- / 6.982
P-40	Total Gross/Weapon System Cost			- / -	- / 2.832	- / 4.041	- / 6.982	- / -	- / 6.982

*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 0804733F GENERAL INTELLIGENCE SKILL TRAINING

GOODFELLOW INTELLIGENCE TRAINING ARCHITECTURE (GITA) Upgrade: FY17 funding includes a portion of an overall \$25M increase within Air Education & Training Command (AETC) to fix numerous training disconnects and mitigate training aircraft obsolescence in avionics, software, and ground based training systems (GBTS). This budget line will also continue to fund the GAFB Intelligence Training System (ITS) and GITA infrastructure consisting of the hardware and associated software replacements to the training network backbone. The GITA effort procures additional hardware for interactive courseware development labs, workstations supporting scenario-based exercise training, and servers and network equipment needed to support software used in the field and combatant commands.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2	P-1 Line Item Number / Title: 832060 / Intelligence Training Equipment	Aggregated Items Title: Intelligence Training Equipment
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
UNCATEGORIZED																				
GITA UPGRADE	A		-	-	-	-	-	2.832	-	-	4.041	-	-	6.982	-	-	-	-	-	6.982
Subtotal: UNCATEGORIZED			-	-	-	-	-	2.832	-	-	4.041	-	-	6.982	-	-	-	-	-	6.982
Total			-	-	-	-	-	2.832	-	-	4.041	-	-	6.982	-	-	-	-	-	6.982

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 0305179F, 0305192F, 0305221F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	22.168	32.329	22.573	30.504	-	30.504	31.955 ^(a)	30.437 ^(b)	28.989 ^(c)	29.512 ^(d)	-	228.467 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	22.168	32.329	22.573	30.504	-	30.504	31.955	30.437	28.989	29.512	-	228.467
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	22.168	32.329	22.573	30.504	-	30.504	31.955	30.437	28.989	29.512	-	228.467

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY17 funding was reduced by \$.754M to account for the availability of prior year execution balances.

Combat Air Intelligence System Activities PE 0207431F - 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 combines and fields the capabilities of Personal Computer- Integrated Imagery and Intelligence (PC-I3), Targeting Application Workstation (TAW), and Weapon System Video (WSV) as an optional load, all previously fielded as separate systems. ULI simplifies unit deployment requirements with all-in-one standard system.

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 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.

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).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 0305179F, 0305192F, 0305221F	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>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.</p> <p>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 commencing in FY17.</p> <p>Defense Joint Counterintelligence Activities PE 0305146F - 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.</p> <p>Integrated Broadcast Service (IBS) PE 0305179F - Intelligence Comm Equipment 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.</p> <p>Military Intelligence Program (MIP) Activities PE 0305192F - P-40A Provides data recovery capabilities for mission critical intelligence information across the Service. AF DRP is working with the four Joint Worldwide Intelligence Systems (JWICS) Enterprise Service Centers (ESCs) to integrate Disaster Recovery capabilities for core services such as email, file, and print servers. After recovery solutions have been provided for these services, AF DRP will seek to secure critical mission data and applications. The AF DRP backup and recovery at the ESCs will provide support ranging from the AF Intelligence Center's strategic national intelligence role down to operational mission units. This is MIP funding.</p> <p>Network-Centric Collaborative Targeting PE 0305221F - P-40A Network Centric Collaborative Targeting (NCCT) is the Air Force program of record responsible for investing in core geo-location tools and technologies to horizontally and vertically integrate Battle Management/Command and Control/Intelligence, Surveillance and Reconnaissance (BM/C2/ISR) sensor systems both within and across disciplines. NCCT consists of hardware and software standards, network management, cross-domain solutions, platform interface modules and data correlation services. Correlated information enables rapid geo-location and tracking to execute Air Superiority as well as support Joint and Coalition contributions to national security requirements. NCCT correlation and fusion services represent the software segment of the program and are responsible for ingest operations, targeting, and intelligence collection data to produce a single, composite track (identification and geo-location) of time-sensitive and high priority targets. NCCT software applications employ machine-to-machine interfaces and internet protocol (IP) communications connectivity to coordinate sensor cross-cues and collection activities. NCCT research and development funding supports evolutionary development of the NCCT message set and network management systems, the migration of the NCCT technologies to emerging network centric technologies (service oriented architectures and web services), and satisfaction of DoD standards and information assurance requirements.</p> <p>Current NCCT-enabled systems and programmed efforts include, but are not limited to, RC-135 RIVET JOINT/COMBAT SENT/COBRA BALL systems, EC-130 COMPASS CALL, Distributed Common Ground Systems (DCGS), forward processing/exploitation/dissemination (FPED), Falconer Air Operations Centers (AOC), vehicle and dismount exploitation radar (VADER), Gorgon Stare QRC, MC-12W Liberty Project Aircraft, Overhead Intelligence Operations (OIO), national systems, and multiple coalition partner platforms.</p> <p>The NCCT core technologies investments include, but are not limited to, operations 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.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 0305179F, 0305192F, 0305221F	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>Space Situation Awareness Operations - MIP PE 0305942F - P-40A DISTRIBUTED SPACE COMMAND AND CONTROL - DAHLGREN (DSC2-D): The DSC2-D, located in Dahlgren, VA, is the alternate Command and Control facility to the Joint Space Operations Center (JSpOC) Space Situational Awareness Cell at Vandenberg AFB, CA. As the operational backup, it provides support to the Air Force Space Command mission responsibilities for cataloging and maintenance of satellite payloads and debris, New Foreign Launch orbit determination, and collision avoidance. Additionally, the DSC2-D is the sole provider for unique Navy SSA data products for Fleet and ashore support and also provides SSA data products to other National users.</p> <p>COBRA DANE RADAR: The Cobra Dane Radar improves midcourse Ballistic Missile Defense System (BMDS) sensor coverage to provide tracking of threat ballistic missiles to commit the launch of interceptors and to update the target tracks while the interceptor is in flight.</p> <p>Space Superiority Intelligence - P-40A Cyber Situational Awareness Weapon System (C-SAWS) is a process for connecting 24 AF unfiltered AF traffic flow and moving it to 25 AF for PED (Processing, Analysis and Distribution) enabling the first AF Cyber ISR collection and processing capability to provide ISR based adversary cyber activity Indications and Warnings (I&W) for Situational Awareness (SA). The program provides 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 netflow and packet capture (PCAP). This data is moved via long-haul to the 25 AF El Dorado PED system 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.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:**
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:** 0305179F, 0305192F, 0305221F
Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Combat Air Intelligence System Activities			- / 4.020	- / 5.110	- / 3.894	- / 6.242	- / -	- / 6.242
P-40a	Defense Joint Counterintelligence Activities			- / 0.756	- / 0.618	- / 0.460	- / 0.711	- / -	- / 0.711
P-40a	Integrated Broadcast Service (IBS)			- / 4.000	- / 3.872	- / 1.905	- / 4.003	- / -	- / 4.003
P-40a	Integrated Broadcast Service (IBS)			- / 10.121	- / 11.082	- / 9.506	- / 12.449	- / -	- / 12.449
P-40a	Military Intelligence Program (MIP) Activities			- / 0.000	- / 3.920	- / 2.900	- / 4.520	- / -	- / 4.520
P-40a	Network-Centric Collaborative Targeting			- / 0.000	- / 2.970	- / 2.420	- / 2.580	- / -	- / 2.580
P-40a	Space Situation Awareness Operations - MIP			- / 3.271	- / 4.757	- / -	- / -	- / -	- / -
P-40a	Space Superiority Intelligence			- / 0.000	- / -	- / 1.490	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 22.168	- / 32.329	- / 22.573	- / 30.504	- / -	- / 30.504

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Combat Air Intelligence System Activities			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Defense Joint Counterintelligence Activities			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Integrated Broadcast Service (IBS)			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Integrated Broadcast Service (IBS)			- / 11.936	- / 10.940	- / 11.266	- / 11.480	- / -	- / 88.780
P-40a	Military Intelligence Program (MIP) Activities			- / 4.390	- / 4.070	- / 4.140	- / 4.210	- / -	- / 28.150
P-40a	Network-Centric Collaborative Targeting			- / 3.280	- / 3.090	- / 3.140	- / 3.200	- / -	- / 20.680
P-40a	Space Situation Awareness Operations - MIP			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Space Superiority Intelligence			- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 31.955	- / 30.437	- / 28.989	- / 29.512	- / -	- / 228.467

*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:

Combat Air Intelligence System Activities PE 0207431F - P-40A
ENHANCED GEOSPATIAL PRODUCT LIBRARY (EGPL): FY17 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: FY17 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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 0305179F, 0305192F, 0305221F	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>INFORMATION STORAGE (iStoRE): FY17 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.</p> <p>GLOBAL COMMAND AND CONTROL SYSTEM -INTEGRATED IMAGERY AND INTELLIGENCE (GCCS-I3): FY17 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).</p> <p>Information for Operational and Tactical Analysis (IOTA): FY17 funding provided installation costs in support of fielding into the Air Operations Centers (AOC).</p> <p>Intelligence Automated Data Processing Equipment (IADPE): FY17 funding will be used to procure servers, storage devices, associated hardware upgrades and installation costs.</p> <p>Targeting and Geospatial Intelligence (T&G) PMO Center of Excellence (COE): FY17 funding will be used for site surveys and installation costs in support of fielding new capabilities.</p> <p>Defense Joint Counterintelligence Activities PE 0305146F - P-40A FY17 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.</p> <p>Integrated Broadcast Service (IBS) PE 0305179F - Intelligence Comm Equipment FY17 funding for IBS procurement efforts are focused in the following areas:</p> <p>(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.</p> <p>(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.</p> <p>(3) COMMON MESSAGE 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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 0305179F, 0305192F, 0305221F	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>Military Intelligence Program (MIP) Activities PE 0305192F - P-40A FY17 funding will enable completion of AF JWICS Enterprise disaster recovery capabilities for core services at the four Enterprise Service Centers (ESCs). AF DRP will determine implementation strategy for the development and application of a disaster recovery solution for NASIC, PACAF, and possibly EUCOM to support their local Continuity of Operations/Disaster Recovery (COOP/DR) requirements by providing information recovery technology for Top Secret/Sensitive Compartmented Information (SCI) level networks. Funds will be used to conduct site surveys, procure servers, storage devices, associated software/hardware upgrades, and installation costs.</p> <p>Network-Centric Collaborative Targeting PE 0305221F - P-40A FY17 funding is for NCCT hardware refresh at ground stations in support of a new software baseline roll out and user requested upgrades. The NCCT core technologies investments include, but are not limited to, operations 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.</p> <p>Space Situation Awareness Operations - MIP PE 0305942F - P-40A No FY17 funding requested.</p> <p>Space Superiority Intelligence - P-40A No FY17 funding requested.</p> <p>Efforts with funding starting in FY 2018 through FY 2021 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:</p> <ul style="list-style-type: none"> (a) FY 2018 Cost Delta: 12.349 million (b) FY 2019 Cost Delta: 12.337 million (c) FY 2020 Cost Delta: 10.443 million (d) FY 2021 Cost Delta: 10.622 million (e) FY Total Cost Delta: 90.857 million 		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2 **P-1 Line Item Number / Title:** 832070 / Intelligence Comm Equipment **Aggregated Items Title:** Combat Air Intelligence System Activities

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CAIS PE 0207431F	A		-	-	4.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ULI	A		-	-	0.000	-	-	5.110	-	-	1.368	-	-	2.228	-	-	-	-	-	2.228
GPL	A		-	-	0.000	-	-	-	-	-	1.080	-	-	1.800	-	-	-	-	-	1.800
IStore	A		-	-	0.000	-	-	-	-	-	0.520	-	-	0.550	-	-	-	-	-	0.550
GCCS-I3	A		-	-	0.000	-	-	-	-	-	0.312	-	-	0.523	-	-	-	-	-	0.523
IOTA	A		-	-	0.000	-	-	-	-	-	0.314	-	-	-	-	-	-	-	-	-
COE T&G Integrator	A		-	-	0.000	-	-	-	-	-	0.300	-	-	0.821	-	-	-	-	-	0.821
IADPE	A		-	-	0.000	-	-	-	-	-	-	-	-	0.320	-	-	-	-	-	0.320
Subtotal: Uncategorized			-	-	4.020	-	-	5.110	-	-	3.894	-	-	6.242	-	-	-	-	-	6.242
Total			-	-	4.020	-	-	5.110	-	-	3.894	-	-	6.242	-	-	-	-	-	6.242

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2							P-1 Line Item Number / Title: 832070 / Intelligence Comm Equipment							Aggregated Items Title: Defense Joint Counterintelligence Activities					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
DEFENSE JOINT COUNTERINTELLIGENCE PROGRAM PE 0305146F	A		-	-	0.756	-	-	0.618	-	-	0.460	-	-	0.711	-	-	-	-	-	0.711
Subtotal: Uncategorized			-	-	0.756	-	-	0.618	-	-	0.460	-	-	0.711	-	-	-	-	-	0.711
Total			-	-	0.756	-	-	0.618	-	-	0.460	-	-	0.711	-	-	-	-	-	0.711

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2 **P-1 Line Item Number / Title:** 832070 / Intelligence Comm Equipment **Aggregated Items Title:** Integrated Broadcast Service (IBS)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
IBS-NS PE 0305179F	A		-	-	4.000	-	-	3.872	-	-	1.905	-	-	4.003	-	-	-	-	-	4.003
Subtotal: Uncategorized			-	-	4.000	-	-	3.872	-	-	1.905	-	-	4.003	-	-	-	-	-	4.003
Total			-	-	4.000	-	-	3.872	-	-	1.905	-	-	4.003	-	-	-	-	-	4.003

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

Remarks:

(6) IBS-NS: Scaling capability is required for messaging under operational use. Funds replace Global IBS Servers (GINS), Theater Interface Nodes (TINS), technology refreshment and integration as necessitated by mission changes, system interoperability, and system security.

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2						P-1 Line Item Number / Title: 832070 / Intelligence Comm Equipment						Aggregated Modification Items Title: Integrated Broadcast Service (IBS)							

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Mod 1 IBS / Mod 1 IBS			-	-	2.616	-	-	2.642	-	-	1.548	-	-	3.741	-	-	-	-	-	3.741
Mod 2 / Mod 2			-	-	3.108	-	-	3.167	-	-	3.167	-	-	3.167	-	-	-	-	-	3.167
Mod 3 / Mod 3			-	-	1.274	-	-	1.298	-	-	0.816	-	-	1.298	-	-	-	-	-	1.298
Mod 4 / Mod 4			-	-	2.063	-	-	2.102	-	-	2.102	-	-	2.370	-	-	-	-	-	2.370
Mod 5 / Mod 5			-	-	1.060	-	-	1.873	-	-	1.873	-	-	1.873	-	-	-	-	-	1.873
Total			-	-	10.121	-	-	11.082	-	-	9.506	-	-	12.449	-	-	-	-	-	12.449

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Mod 1 IBS / Mod 1 IBS			-	-	3.354	-	-	2.500	-	-	2.573	-	-	2.622	-	-	-	-	-	21.596
Mod 2 / Mod 2			-	-	3.133	-	-	3.167	-	-	3.262	-	-	3.324	-	-	-	-	-	25.495
Mod 3 / Mod 3			-	-	1.300	-	-	1.298	-	-	1.337	-	-	1.362	-	-	-	-	-	9.983
Mod 4 / Mod 4			-	-	2.276	-	-	2.102	-	-	2.165	-	-	2.206	-	-	-	-	-	17.386
Mod 5 / Mod 5			-	-	1.873	-	-	1.873	-	-	1.929	-	-	1.966	-	-	-	-	-	14.320
Total			-	-	11.936	-	-	10.940	-	-	11.266	-	-	11.480	-	-	-	-	-	88.780

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	Reliability & Maintainability
Mod 2 / Mod 2	IBS	Reliability & Maintainability
Mod 3 / Mod 3	IBS	Reliability & Maintainability
Mod 4 / Mod 4	IBS	Reliability & Maintainability
Mod 5 / Mod 5	IBS	Reliability & Maintainability

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2							P-1 Line Item Number / Title: 832070 / Intelligence Comm Equipment							Aggregated Modification Items Title: Military Intelligence Program (MIP) Activities					

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
MIP1 / JWICS			-	-	-	-	-	3.920	-	-	2.900	-	-	4.520	-	-	-	-	-	4.520
Total			-	-	0.000	-	-	3.920	-	-	2.900	-	-	4.520	-	-	-	-	-	4.520

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
MIP1 / JWICS			-	-	4.390	-	-	4.070	-	-	4.140	-	-	4.210	-	-	-	-	-	28.150
Total			-	-	4.390	-	-	4.070	-	-	4.140	-	-	4.210	-	-	-	-	-	28.150

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
MIP1 / JWICS	0301592F	Reliability & Maintainability

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2 **P-1 Line Item Number / Title:** 832070 / Intelligence Comm Equipment **Aggregated Modification Items Title:** Network-Centric Collaborative Targeting

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
NCCT1 / Replacement of Ground Stations			-	-	-	-	-	2.970	-	-	2.420	-	-	2.580	-	-	-	-	-	2.580
Total			-	-	0.000	-	-	2.970	-	-	2.420	-	-	2.580	-	-	-	-	-	2.580

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
NCCT1 / Replacement of Ground Stations			-	-	3.280	-	-	3.090	-	-	3.140	-	-	3.200	-	-	-	-	-	20.680
Total			-	-	3.280	-	-	3.090	-	-	3.140	-	-	3.200	-	-	-	-	-	20.680

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 Stations	NA	Reliability & Maintainability

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2						P-1 Line Item Number / Title: 832070 / Intelligence Comm Equipment						Aggregated Items Title: Space Situation Awareness Operations - MIP							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
DSC2-D PE 0305942F	A		-	-	3.271	-	-	4.757	-	-	-	-	-	-	-	-	-	-	-	-
COBRA DANE RADAR	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	3.271	-	-	4.757	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	3.271	-	-	4.757	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 2 **P-1 Line Item Number / Title:** 832070 / Intelligence Comm Equipment **Aggregated Items Title:** Space Superiority Intelligence

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Space Superiority Intelligence PE 0301400F	A		-	-	0.000	-	-	-	-	-	1.490	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	0.000	-	-	-	-	-	1.490	-	-	-	-	-	-	-	-	
Total			-	-	0.000	-	-	-	-	-	1.490	-	-	-	-	-	-	-	-	

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

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

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	30.588	23.912	28.823	55.803	42.650	98.453	62.739	59.049	56.533	47.198	-	407.295
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	30.588	23.912	28.823	55.803	42.650	98.453	62.739	59.049	56.533	47.198	-	407.295
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	30.588	23.912	28.823	55.803	42.650	98.453	62.739	59.049	56.533	47.198	-	407.295

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	3.306	1.011	3.406	-	3.406	3.119	1.072	1.390	3.563	-	16.867
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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, sequencing, separation, and landing guidance services to all aircraft in USAF-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 system 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 operations 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. ATCALs also includes procurement of a new Deployable Instrument Landing System (D-ILS) which will replace the 1970s era mobile precision approach radar. 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 commonality and 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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs	P-1 Line Item Number / Title: 833010 / Air Traffic Control & Landing Sys
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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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 for contingency operations and humanitarian or disaster relief operations. D-ILS will replace the current Air Force mobile Precision Approach Radar (PAR) system used to support operations at deployed locations. These systems were procured in the 1970s, are manpower intensive, and logistically unsupportable. On average, only 18% (three of 17 systems) of the mobile PAR systems are operational on a daily basis. D-ILS will support increased operations in the area of responsibility, allow phase out of the currently obsolete legacy systems and provide interoperability with the Civil Reserve Air Fleet.

4. Deployable Radar Approach Control (D-RAPCON): D-RAPCON will replace the 40 year old AN/MPN-14K and AN/TPN-19 Airport Surveillance Radar (ASR) and Operations Shelter (OPS) 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, no more than three of the existing 17 systems are deployable at any given time. The current AN/TPN-19 and AN/MPN-14K Operational Availability rates are 69% and 67% respectively versus the a 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 fixed base or deployable Instrument Landing System and a fixed or mobile control tower to provide a complete air traffic control capability. The D-RAPCON will support tactical military and worldwide humanitarian operations and also provide a capability to 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 to 200 nm. Due to diminishing manufacturing sources, life of type purchases will be required each year. The D-RAPCON Capability Development Document was approved by the Air Force Requirements Oversight Council on 8 Feb 11.

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

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	215	159	205	-	205	168	169	514	528
	Total Obligation Authority	20.465	26.883	55.803	2.078	57.881	49.959	45.682	42.647	18.868
AFNG	Quantity	5	4	-	6	6	1	1	1	1
	Total Obligation Authority	1.905	1.552	-	40.572	40.572	12.780	13.367	13.886	28.330
AFR	Quantity	4	1	-	-	-	-	-	-	-
	Total Obligation Authority	1.542	0.388	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	224	164	205	6	211	169	170	515	529
	Total Obligation Authority	23.912	28.823	55.803	42.650	98.453	62.739	59.049	56.533	47.198

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs **P-1 Line Item Number / Title:** 833010 / Air Traffic Control & Landing Sys

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Digital Air Traffic Control Radio Replacement			- / -	- / 3.777	- / 2.590	- / 3.282	- / -	- / 3.282
P-5	Deployable Radar Approach Control (D-RAPCON)	P-5a	B	- / -	- / -	- / -	2 / 24.866	- / -	2 / 24.866
P-5	FB NAVAIDs FOS TACAN/VORTAC	P-5a	A	- / 8.418	26 / 17.045	27 / 16.655	30 / 16.249	- / -	30 / 16.249
P-5	D-ILS	P-5a	A	2 / 22.170	- / 3.090	1 / 9.578	1 / 11.406	6 / 42.650	7 / 54.056
P-40	Total Gross/Weapon System Cost			- / 30.588	- / 23.912	- / 28.823	- / 55.803	- / 42.650	- / 98.453

*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, D-RAPCON P-5, is a new start.

1. DIGITAL AIR TRAFFIC CONTROL (ATC) RADIO REPLACEMENT: FY17 funds procure 172 systems (172 AD/0 ANG/0 AFR).
2. ATCALs Fixed Base (FB) Navigational Aids (NAVAIDs) Family of Systems (FoS): FY17 funds procure 23 TACANs (23 AD/0 ANG/0 AFR) and 7 VORTACs (7 AD/0 ANG/0 AFR).
3. DEPLOYABLE INSTRUMENT LANDING SYSTEM (D-ILS): FY17 base funds procure 2 systems (2 AD/0 ANG/0 AFR); FY17 OCO funds procure 10 systems (2 AD/8 ANG/0 AFR).
4. DEPLOYABLE RADAR APPROACH CONTROL (D-RAPCON): FY17 funds procure 2 systems (2 AD/0 ANG/0 AFR).

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833010 / Air Traffic Control & Landing Sys						Aggregated Items Title: Digital Air Traffic Control Radio Replacement							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Digital Air Traffic Control Radio	A		-	-	-	0.019	198	3.777	0.019	136	2.590	0.019	172	3.282	-	-	-	0.019	172	3.282
<i>Secondary Distribution</i>																				
AF			-	-	-	-	198	3.777	-	136	2.590	-	172	3.282	-	-	-	-	172	3.282
Subtotal: Uncategorized			-	-	-	-	-	3.777	-	-	2.590	-	-	3.282	-	-	-	-	-	3.282
Total			-	-	-	-	-	3.777	-	-	2.590	-	-	3.282	-	-	-	-	-	3.282

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

Remarks:
Digital ATC Radios being procured through FAA contract awarded to General Dynamics with fixed price options extending through 2022.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
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) : B	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	2	-	2
Gross/Weapon System Cost (\$ in Millions)	-	-	-	24.866	-	24.866
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	-	24.866	-	24.866
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	-	24.866	-	24.866

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	1.009	-	1.009
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	12.433	-	12.433

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - D-RAPCON Cost																		
Recurring Cost																		
PME Refurbished Unit ^(†)	-	-	-	-	-	-	-	-	-	3.571	1	3.571	-	-	-	3.571	1	3.571
PME Production Unit ^(†)	-	-	-	-	-	-	-	-	-	14.933	1	14.933	-	-	-	14.933	1	14.933
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	18.504	-	-	-	-	-	18.504
<i>Subtotal: Hardware - D-RAPCON Cost</i>	-	-	-	-	-	-	-	-	-	-	-	18.504	-	-	-	-	-	18.504
Support - D-RAPCON Cost																		
Other Procurement Cost	-	-	-	-	-	-	-	-	-	-	-	5.287	-	-	-	-	-	5.287
Direct Mission Support/ GFE	-	-	-	-	-	-	-	-	-	-	-	0.462	-	-	-	-	-	0.462
PMA Contractor Services AFLCMC (Hanscom AFB)	-	-	-	-	-	-	-	-	-	-	-	0.161	-	-	-	-	-	0.161
PMA Other Government Costs	-	-	-	-	-	-	-	-	-	-	-	0.452	-	-	-	-	-	0.452
<i>Subtotal: Support - D-RAPCON Cost</i>	-	-	-	-	-	-	-	-	-	-	-	6.362	-	-	-	-	-	6.362
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	12.433	2	24.866	-	-	-	12.433	2	24.866

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
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) : B **MDAP/MAIS Code:**

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	Quantity	-	-	2	-	2
	Total Obligation Authority	-	-	24.866	-	24.866
AFNG	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-
AFR	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-
Total:	Quantity	-	-	2	-	2
Secondary Distribution	Total Obligation Authority	-	-	24.866	-	24.866

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force							Date: February 2016				
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)				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
PME Refurbished Unit		2017	Raytheon IDS / Marlboro, MA	C / FPIF	AFLCMC Hanscom AFB	Sep 2017	Apr 2018	1	3.571	N	Jan 2017	Jan 2017
PME Production Unit		2017	Raytheon IDS / Marlboro, MA	C / FPIF	AFLCMC Hanscom AFB	Mar 2017	Jun 2018	1	14.933	N	Jan 2017	Jan 2017

Remarks:
Raytheon Fixed Price Incentive Firm (FPIF) contract with production options

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
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	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	26	27	30	-	30
Gross/Weapon System Cost (\$ in Millions)	8.418	17.045	16.655	16.249	-	16.249
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	8.418	17.045	16.655	16.249	-	16.249
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	8.418	17.045	16.655	16.249	-	16.249

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	3.172	0.955	1.875	-	1.875
Gross/Weapon System Unit Cost (\$ in Millions)	-	0.656	0.617	0.542	-	0.542

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - FB NAVAIDs FOS TACAN/VORTAC Cost																		
Recurring Cost																		
FB NAVAIDs FOS TACAN Replacement ^(f)	0.338	21	7.098	0.381	20	7.620	0.388	20	7.760	0.388	23	8.924	-	-	-	0.388	23	8.924
FB NAVAIDs FOS VORTAC Replacement ^(f)	0.440	3	1.320	0.452	6	2.712	0.465	7	3.255	0.470	7	3.290	-	-	-	0.470	7	3.290
<i>Subtotal: Recurring Cost</i>	-	-	8.418	-	-	10.332	-	-	11.015	-	-	12.214	-	-	-	-	-	12.214
<i>Subtotal: Hardware - FB NAVAIDs FOS TACAN/VORTAC Cost</i>	-	-	8.418	-	-	10.332	-	-	11.015	-	-	12.214	-	-	-	-	-	12.214
Support - FB NAVAIDs FOS TACAN/VORTAC Cost																		
Tech Order Digitization	-	-	-	-	-	-	-	-	1.244	-	-	0.260	-	-	-	-	-	0.260
Interim Contractor Support	-	-	-	-	-	0.400	-	-	0.325	-	-	0.250	-	-	-	-	-	0.250
Depot Activation	-	-	-	-	-	2.233	-	-	2.112	-	-	1.495	-	-	-	-	-	1.495
Universal Remote Status System	-	-	-	-	-	2.165	-	-	-	-	-	-	-	-	-	-	-	-
Direct Mission Support	-	-	-	-	-	0.643	-	-	0.664	-	-	0.590	-	-	-	-	-	0.590
ATCALs PMA AFLCMC (Tinker AFB) Contractor Services	-	-	-	-	-	0.822	-	-	0.835	-	-	0.980	-	-	-	-	-	0.980
ATCALs PMA AFLCMC (Tinker AFB) Other Government Costs	-	-	-	-	-	0.200	-	-	0.205	-	-	0.210	-	-	-	-	-	0.210

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
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									MDAP/MAIS Code:								

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Installation Travel	-	-	-	-	-	0.250	-	-	0.255	-	-	0.250	-	-	-	-	-	0.250
<i>Subtotal: Support - FB NAVAIDs FOS TACAN/VORTAC Cost</i>	-	-	-	-	-	6.713	-	-	5.640	-	-	4.035	-	-	-	-	-	4.035
Gross/Weapon System Cost	-	-	8.418	0.656	26	17.045	0.617	27	16.655	0.542	30	16.249	-	-	-	0.542	30	16.249

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	Quantity	17	22	30	-	30
	Total Obligation Authority	13.598	14.715	16.249	-	16.249
AFNG	Quantity	5	4	-	-	-
	Total Obligation Authority	1.905	1.552	-	-	-
AFR	Quantity	4	1	-	-	-
	Total Obligation Authority	1.542	0.388	-	-	-
Total:	Quantity	26	27	30	-	30
Secondary Distribution	Total Obligation Authority	17.045	16.655	16.249	-	16.249

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

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
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
FB NAVAIDs FOS TACAN Replacement		2012	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Feb 2013	Jan 2016	10	0.338	Y		Jan 2012
FB NAVAIDs FOS TACAN Replacement		2013	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Mar 2014	Apr 2016	11	0.338	Y		Jan 2012
FB NAVAIDs FOS TACAN Replacement		2015	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Feb 2015	Sep 2016	20	0.381	Y		Jan 2012
FB NAVAIDs FOS TACAN Replacement		2016	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Feb 2016	Apr 2017	20	0.388	Y		Jan 2012
FB NAVAIDs FOS TACAN Replacement		2017	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Feb 2017	Dec 2017	23	0.388	Y		Jan 2012
FB NAVAIDs FOS VORTAC Replacement		2013	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Mar 2013	Apr 2016	3	0.440	Y		Jan 2012
FB NAVAIDs FOS VORTAC Replacement		2015	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Feb 2015	Sep 2016	6	0.452	Y		Jan 2012
FB NAVAIDs FOS VORTAC Replacement		2016	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Feb 2016	Apr 2017	7	0.465	Y		Jan 2012
FB NAVAIDs FOS VORTAC Replacement		2017	Thales / Overland Park, Kansas	C / FFP	AFLCMC Tinker AFB	Feb 2017	Dec 2017	7	0.470	Y		Jan 2012

Remarks:
Single contract with five equipment options and option for interim contractor support. Contract awarded to Thales in 2013.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
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]: - / D-ILS

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	2	-	1	1	6	7
Gross/Weapon System Cost (\$ in Millions)	22.170	3.090	9.578	11.406	42.650	54.056
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	22.170	3.090	9.578	11.406	42.650	54.056
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	22.170	3.090	9.578	11.406	42.650	54.056

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	0.000	0.134	-	0.446	-	0.446
Gross/Weapon System Unit Cost (\$ in Millions)	11.085	-	9.578	11.406	7.108	7.722

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - D-ILS Cost																		
Recurring Cost																		
D-ILS Systems ^{(†) (1)}	8.615	2	17.230	-	-	-	7.107	1	7.107	6.762	1	6.762	6.762	6	40.572	6.762	7	47.334
<i>Subtotal: Recurring Cost</i>	-	-	17.230	-	-	-	-	-	7.107	-	-	6.762	-	-	40.572	-	-	47.334
<i>Subtotal: Hardware - D-ILS Cost</i>	-	-	17.230	-	-	-	-	-	7.107	-	-	6.762	-	-	40.572	-	-	47.334
Support - D-ILS Cost																		
Direct Mission Support/ Interim Contractor Support	-	-	4.285	-	-	2.569	-	-	1.469	-	-	3.874	-	-	2.078	-	-	5.952
PMA Contractor Services AFLCMC (Hanscom AFB)	-	-	0.655	-	-	0.521	-	-	1.002	-	-	0.770	-	-	-	-	-	0.770
<i>Subtotal: Support - D-ILS Cost</i>	-	-	4.940	-	-	3.090	-	-	2.471	-	-	4.644	-	-	2.078	-	-	6.722
Gross/Weapon System Cost	11.085	2	22.170	-	-	3.090	9.578	1	9.578	11.406	1	11.406	7.108	6	42.650	7.722	7	54.056

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	-	1	1	-	1
Total Obligation Authority	3.090	9.578	11.406	2.078	13.484
AFNG	-	-	-	6	6
Total Obligation Authority	-	-	-	40.572	40.572
AFR	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

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]: - / D-ILS
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ID Code (A=Service Ready, B=Not Service Ready) : A **MDAP/MAIS Code:**

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Secondary Distribution					
Total Obligation Authority	-	-	-	-	-
Total:					
Secondary Distribution					
Quantity	-	1	1	6	7
Total Obligation Authority	3.090	9.578	11.406	42.650	54.056

(t) indicates the presence of a P-5a

Footnotes:

(1) Firm Fixed Price (FFP) contract with production FFP option.

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

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]: - / D-ILS
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
D-ILS Systems		2014	Thales / Clarksburg, Maryland	SS / FFP	AFLCMC Hanscom AFB	Jul 2015	May 2016	2	8.615	Y		Dec 2014
D-ILS Systems		2016	Thales / Clarksburg, Maryland	SS / FFP	AFLCMC Hanscom AFB	Jul 2016	Jan 2017	1	7.107	Y		
D-ILS Systems		2017	Thales / Clarksburg, Maryland	SS / FFP	AFLCMC Hanscom AFB	Dec 2016	May 2017	1	6.762	Y		
D-ILS Systems	✓	2017	Thales / Clarksburg, Maryland	SS / FFP	AFLCMC Hanscom AFB	May 2017	Sep 2017	6	6.762	Y		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833020 / National Airspace System

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	738.597	6.291	5.833	2.673	-	2.673	2.721	2.769	2.818	2.869	-	764.571
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	738.597	6.291	5.833	2.673	-	2.673	2.721	2.769	2.818	2.869	-	764.571
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	738.597	6.291	5.833	2.673	-	2.673	2.721	2.769	2.818	2.869	-	764.571

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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, 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], 48 Digital Airport Surveillance Radars (DASRs), and other equipment required to interface with the FAA.

DAAS is comprised of equipment tailored to support two types of ATC operations facilities: Radar Approach Control (RAPCON) and military control tower facilities. It provides digital radar displays, consoles, automation hardware and software to replace systems approaching the end of their life cycle. DASR consists of two subsystems: a primary and a secondary surveillance radar. DASR provides aircraft position and other data to controller displays in the RAPCON and at select control tower locations. DASR replaces the current generation of DoD analog ATC surveillance radars.

The NAS modernization program will complete equipment procurement and installation in FY2017 and is now transitioning to the operations and support phase which will focus on mitigation of DAAS/DASR diminishing manufacturing source (DMS) and sustainment issues.

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.

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833020 / National Airspace System

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 **Item MDAP/MAIS Code(s):** N/A

ATCALs procures and supports fixed-base and tactical radar, navigation aids, voice communications, and data processing/automation capabilities. ATCALs enables United States Air Force (USAF) air traffic controllers to provide advisory, sequencing, separation, and landing guidance services to all aircraft in AF-assigned airspace. ATCALs support under PE 0305114F for the NAS program includes mitigation of DMS issues (replacement of obsolete DAAS processors and displays), and procurement of one DAAS to support the ATCALs/DAAS Operational Support Facility (OSF).

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.

Note: DMS mitigation funding was not part of the NAS Acquisition Category ACAT IC program baseline and therefore, is not included in System Acquisition Report unit cost calculations or the P-21 Production Schedule.

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

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	264	1	-	-	-	-	-	-	-
	Total Obligation Authority	6.291	5.833	2.673	-	2.673	2.721	2.769	2.818	2.869
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
Total:	Quantity	264	1	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	6.291	5.833	2.673	-	2.673	2.721	2.769	2.818	2.869

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Air Traffic Control, Approach, and Landing System (ATCALs)			- / -	- / 4.114	- / 3.628	- / -	- / -	- / -
P-5	National Airspace System (NAS) Plan	P-5a, P-21	A	139 / 738.597	- / 2.177	- / 2.205	- / 2.673	- / -	- / 2.673
P-40	Total Gross/Weapon System Cost			- / 738.597	- / 6.291	- / 5.833	- / 2.673	- / -	- / 2.673

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Air Traffic Control, Approach, and Landing System (ATCALs)			- / -	- / -	- / -	- / -	- / -	- / 7.742
P-5	National Airspace System (NAS) Plan	P-5a, P-21	A	- / 2.721	- / 2.769	- / 2.818	- / 2.869	- / -	139 / 756.829
P-40	Total Gross/Weapon System Cost			- / 2.721	- / 2.769	- / 2.818	- / 2.869	- / -	- / 764.571

*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 0305114F AIR TRAFFIC CONTROL AND LANDING SYSTEMS (ATCALs): Equipment procurements under the ATCALs PE include the following:

- NAS CAPITAL EQUIPMENT REPLACEMENT PROCESSORS (unit cost under \$250K but funded with procurement funds as processors certified and centrally managed by FAA): No FY17 funding requested.
- NAS CAPITAL EQUIPMENT REPLACEMENT DISPLAYS (unit cost under \$250K but funded with procurement funds as displays certified and centrally managed by FAA): No FY17 funding requested.
- ATCALs/DAAS OSF EQUIPMENT: No FY17 funds requested.

PE 0305137F NATIONAL AIRSPACE SYSTEM (NAS): FY17 funds continue analysis to mitigate DASR/DAAS DMS issues, conduct recurring optimization of fielded system configurations to align with changing site characteristics, and continue NAS program support.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3							P-1 Line Item Number / Title: 833020 / National Airspace System								Aggregated Items Title: Air Traffic Control, Approach, and Landing System (ATCALs)				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
NAS Capital Equipment Replacement																				
Processors ⁽¹⁾	A		-	-	-	0.010	221	2.141	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		221	2.141		-	-		-	-		-	-		-	
AFNG				-	-		-	-		-	-		-	-		-	-		-	
AFR				-	-		-	-		-	-		-	-		-	-		-	
Displays ⁽²⁾	A		-	-	-	0.046	43	1.973	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		43	1.973		-	-		-	-		-	-		-	
AFNG				-	-		-	-		-	-		-	-		-	-		-	
AFR				-	-		-	-		-	-		-	-		-	-		-	
ATCALs/NAS Equip ⁽³⁾	A		-	-	-	-	-	-	3.628	1	3.628	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		1	3.628		-	-		-	-		-	
Subtotal: NAS Capital Equipment Replacement			-	-	-	-	-	4.114	-	-	3.628	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	4.114	-	-	3.628	-	-	-	-	-	-	-	-	

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
NAS Capital Equipment Replacement																				
Processors ⁽¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.010	221	2.141
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	
AFNG				-	-		-	-		-	-		-	-		-	-		-	
AFR				-	-		-	-		-	-		-	-		-	-		-	
Displays ⁽²⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.046	43	1.973
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	
AFNG				-	-		-	-		-	-		-	-		-	-		-	
AFR				-	-		-	-		-	-		-	-		-	-		-	
ATCALs/NAS Equip ⁽³⁾	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.628	1	3.628
<i>Secondary Distribution</i>																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3							P-1 Line Item Number / Title: 833020 / National Airspace System							Aggregated Items Title: Air Traffic Control, Approach, and Landing System (ATCALs)					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: NAS Capital Equipment Replacement			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.742
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.742

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

Footnotes:
 (1) Option to the Federal Aviation Administration Standard Terminal Automated Replacement System contract (also known as DAAS).
 (2) Option to the Federal Aviation Administration Standard Terminal Automated Replacement System contract (also known as DAAS).
 (3) Option to the Federal Aviation Administration Standard Terminal Automated Replacement System contract (also known as DAAS).

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Exhibit P-5, Cost Analysis: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3					P-1 Line Item Number / Title: 833020 / National Airspace System					Item Number / Title [DODIC]: - / National Airspace System (NAS) Plan			

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	139	-	-	-	-	-	-	-	-	-	-	139
Gross/Weapon System Cost (\$ in Millions)	738.597	2.177	2.205	2.673	-	2.673	2.721	2.769	2.818	2.869	-	756.829
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	738.597	2.177	2.205	2.673	-	2.673	2.721	2.769	2.818	2.869	-	756.829
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	738.597	2.177	2.205	2.673	-	2.673	2.721	2.769	2.818	2.869	-	756.829

(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)	5.314	-	-	-	-	-	-	-	-	-	-	5.445

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - NAS Cost																		
Recurring Cost																		
DAAS/DASR ^(†)	4.775	139	663.771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	663.771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - NAS Cost	-	-	663.771	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Logistics - Logistics End Item Cost																		
Recurring Cost																		
DASR Site Activation	-	-	46.337	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	46.337	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Logistics - Logistics End Item Cost	-	-	46.337	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - Support End Item Cost																		
Program Management Administration Contractor Services	-	-	22.456	-	-	2.097	-	-	2.123	-	-	2.588	-	-	-	-	-	2.588
Program Management Administration Other Government Costs	-	-	6.033	-	-	0.080	-	-	0.082	-	-	0.085	-	-	-	-	-	0.085
Subtotal: Support - Support End Item Cost	-	-	28.489	-	-	2.177	-	-	2.205	-	-	2.673	-	-	-	-	-	2.673
Gross/Weapon System Cost	5.314	139	738.597	-	-	2.177	-	-	2.205	-	-	2.673	-	-	-	-	-	2.673

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3		P-1 Line Item Number / Title: 833020 / National Airspace System
		Item Number / Title [DODIC]: - / National Airspace System (NAS) Plan

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - NAS Cost																		
Recurring Cost																		
DAAS/DASR ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.775	139	663.771
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	663.771
<i>Subtotal: Hardware - NAS Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	663.771
Logistics - Logistics End Item Cost																		
Recurring Cost																		
DASR Site Activation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46.337
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46.337
<i>Subtotal: Logistics - Logistics End Item Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46.337
Support - Support End Item Cost																		
Program Management Administration Contractor Services	-	-	2.627	-	-	2.670	-	-	2.717	-	-	2.758	-	-	-	-	-	40.036
Program Management Administration Other Government Costs	-	-	0.094	-	-	0.099	-	-	0.101	-	-	0.111	-	-	-	-	-	6.685
<i>Subtotal: Support - Support End Item Cost</i>	-	-	2.721	-	-	2.769	-	-	2.818	-	-	2.869	-	-	-	-	-	46.721
Gross/Weapon System Cost	-	-	2.721	-	-	2.769	-	-	2.818	-	-	2.869	-	-	-	5.445	139	756.829

Remarks:

(1) Last Air Force DASR procured in FY11 and last DAAS in FY13. DAAS and DASR site preparation activities commence upon option exercise. DAAS Installation and Check-Out (INCO) is completed approximately one year after option exercise. DASR INCO is completed approximately two years after option exercise.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.177	2.205	2.673	-	2.673	2.721	2.769	2.818	2.869
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	2.177	2.205	2.673	-	2.673	2.721	2.769	2.818	2.869

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833020 / National Airspace System	Item Number / Title [DODIC]: - / National Airspace System (NAS) Plan
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
DAAS/DASR ^(†)		2010	Raytheon / Marlboro, MA	C / FFP	AFLCMC Hanscom AFB	May 2010	May 2011	5	3.325	Y		Oct 2009
DAAS/DASR ^(†)		2012	Raytheon / Marlboro, MA	C / FFP	AFLCMC Hanscom AFB	Jan 2012	Jun 2013	6	4.169	Y		Oct 2011
DAAS/DASR ^(†)		2013	Raytheon / Marlboro, MA	C / FFP	AFLCMC Hanscom AFB	Jan 2013	Jan 2014	9	0.936	Y		Sep 2012

^(†) indicates the presence of a P-21

Remarks:

In FY13, unit cost is lower as the nine DAAS systems being procured are for standalone air traffic control towers which is a smaller version of the DAAS radar approach control (RAPCON) system procured in FY10 and FY12.

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833020 / National Airspace System **Item Number / Title [DODIC]:**
- / National Airspace System (NAS) Plan

Cost Elements <i>(Units in Each)</i>				Fiscal Year 2012														Fiscal Year 2013										BALANCE					
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2011	BAL DUE AS OF 1 OCT	Calendar Year 2012														Calendar Year 2013												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N		J U L	A U G	S E P		
DAAS/DASR																																	
Prior Years Deliveries: 119																																	
1	2010	AF ⁽⁴⁾		5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	2010	NAVY ^(‡)		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1	2010	Total		6	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
1	2012	AF ⁽⁵⁾		6	-	6				A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	
1	2012	NAVY ^(‡)		3	-	3				A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
1	2012	Total		9	-	9				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	3	
1	2013	AF ⁽⁶⁾		9	-	9																										9	
1	2013	NAVY ^(‡)		1	-	1																											1
1	2013	Total		10	-	10																											10
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833020 / National Airspace System **Item Number / Title [DODIC]:**
- / National Airspace System (NAS) Plan

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2014													Fiscal Year 2015													BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	Calendar Year 2014													Calendar Year 2015													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
DAAS/DASR																																	
Prior Years Deliveries: 119																																	
1	2010		AF ⁽⁴⁾	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2010		NAVY ^(‡)	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
1	2010		Total	6	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
1	2012		AF ⁽⁵⁾	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1	2012		NAVY ^(‡)	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2				
1	2012		Total	9	6	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2				
1	2013		AF ⁽⁶⁾	9	-	9	-	-	4	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	3				
1	2013		NAVY ^(‡)	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1				
1	2013		Total	10	-	10	-	-	4	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	4				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833020 / National Airspace System **Item Number / Title [DODIC]:**
- / National Airspace System (NAS) Plan

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2016													Fiscal Year 2017												BALANCE		
O C O #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016													Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P	
DAAS/DASR																																
Prior Years Deliveries: 119																																
1	2010		AF ⁽⁴⁾	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2010		NAVY ^(‡)	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2010		Total	6	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2012		AF ⁽⁵⁾	6	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2012		NAVY ^(‡)	3	1	2	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2012		Total	9	7	2	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2013		AF ⁽⁶⁾	9	6	3	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2013		NAVY ^(‡)	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1	2013		Total	10	6	4	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833020 / National Airspace System	Item Number / Title [DODIC]: - / National Airspace System (NAS) Plan
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Raytheon - Marlboro, MA	5	24	48	-	-	-	-	8	4	12	16

Remarks:
Equipment deliveries extend past 12 months as last two systems are for standalone AF air traffic control towers that interface with FAA Traffic Control (TRACON) facilities. The FAA schedule for upgrade of these TRACONs has slipped which in turn delays upgrade of the AF towers.

DAAS AF Reserve (AFR) and Air National Guard (ANG) deliveries:

Qty	FY14	FY15-FY21
AFR	0	0
ANG	2	0

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"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 all quantities are shown in thousands. 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).

Footnotes:

- (4) Prior Year contracts with undelivered assets have all deliveries occurring before Oct 2014 loaded in the month of first delivery.
- (5) Prior Year contracts with undelivered assets have all deliveries occurring before Oct 2014 loaded in the month of first delivery.
- (6) Prior Year contracts with undelivered assets have all deliveries occurring before Oct 2014 loaded in the month of first delivery.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833030 / Battle Control System - Fixed

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	14.409	2.704	1.682	5.677	-	5.677	7.380 ^(a)	4.047 ^(b)	4.118 ^(c)	4.192 ^(d)	-	44.209 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	14.409	2.704	1.682	5.677	-	5.677	7.380	4.047	4.118	4.192	-	44.209
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	14.409	2.704	1.682	5.677	-	5.677	7.380	4.047	4.118	4.192	-	44.209

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

BCS-F supports the NORAD/NORTHCOM homeland defense and air sovereignty mission for fixed Air Defense Sectors.

1. BATTLE CONTROL SYSTEM-FIXED (BCS-F): BCS-F is a bi-national program with Canada. The BCS-F Program supports a battle management command and control system with capability to integrate data from existing and future civil and military defense surveillance systems into a comprehensive recognized air picture. BCS-F systems serve as Air Force Homeland Defense battle management Command and Control hubs and integrators for data from radar sensors, data links and supporting communications architecture. 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. BCS-F Increment 3 program ended after reaching full deployment in November 2012. BCSF baseline also includes Remote Tactical Air Picture/Remote Work Station (RTAP/RWS).

2. NATIONAL CAPITAL REGION - INTEGRATED AIR DEFENSE SYSTEM (NCR-IADS): NCR-IADS provides ground-based air defense of the National Capital Region airspace, and provides an integrated air picture, ground air defense weapons, enhanced regional situational awareness and forensic data collection capabilities for the warfighter mission to protect the NCR.

3. BATTLE CONTROL SYSTEM MODERNIZATION UPGRADES: Provides for capital equipment replacement activities at the Region Air Operations Center-Air Defense Sector (RAOC-ADS) under the Modernization Upgrade effort for Release 3.2.3 and beyond, which include, but are not limited to, Tactical Data Link Interface Device (TDLID) replacement, Automatic Dependent Surveillance - Broadcast(ADSB), Mode 5/Mode S, Computer Network Defense Service Provider (CNDSP), infrastructure upgrades and future Diminishing Manufacturing Sources replacement of other equipment that do not qualify for Centralized Asset Management (CAM) funding. Some aspects of the development are classified and will be provided on a need to know basis.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs **P-1 Line Item Number / Title:** 833030 / Battle Control System - Fixed

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	BCSMU			- / 0.000	- / 1.202	- / 1.582	- / 3.279	- / -	- / 3.279
P-40a	NCR IADS			- / 14.409	- / 1.502	- / 0.100	- / 2.398	- / -	- / 2.398
P-40	Total Gross/Weapon System Cost			- / 14.409	- / 2.704	- / 1.682	- / 5.677	- / -	- / 5.677

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	BCSMU			- / 0.500	- / -	- / -	- / -	- / -	- / 6.563
P-40a	NCR IADS			- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 7.380	- / 4.047	- / 4.118	- / 4.192	- / -	- / 44.209

*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:

Justification:

1. BCS-F
 - a. BCS-F INC 3 UPGRADES: No FY17 funds requested.

2. NCR-IADS
 - a. NCR-IADS EVOLUTIONARY UPGRADES: FY17 funds will provide hardware upgrades and spares that do not qualify for CAM funding. It will also provide hardware for increased cyber security capability.
 - b. PROGRAM MANAGEMENT ADMINISTRATION (PMA) FY17 funds for program management administration costs provide the management, engineering and technical support for the program office.

3. BATTLE CONTROL SYSTEM MODERNIZATION UPGRADES:
 - a. BCS EVOLUTIONARY UPGRADES: FY17 funds will provide hardware upgrades and spares that do not qualify for CAM funding. It will also provide equipment for additional development and testing capability. It will also provide hardware for increased cyber security capability.

Efforts with funding starting in FY 2018 through FY 2021 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 2018 Cost Delta: 6.880 million
- (b) FY 2019 Cost Delta: 4.047 million
- (c) FY 2020 Cost Delta: 4.118 million
- (d) FY 2021 Cost Delta: 4.192 million
- (e) FY Total Cost Delta: 37.646 million

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833030 / Battle Control System - Fixed						Aggregated Modification Items Title: BCSMU							

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
BCSMU-1 / BCS MOD UPGRADES			-	-	-	-	-	1.202	-	-	1.582	-	-	3.279	-	-	-	-	-	3.279
Total			-	-	0.000	-	-	1.202	-	-	1.582	-	-	3.279	-	-	-	-	-	3.279

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
BCSMU-1 / BCS MOD UPGRADES			-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.563
Total			-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.563

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
BCSMU-1 / BCS MOD UPGRADES	BCS-ModernizationUpgrades	Other

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833030 / Battle Control System - Fixed **Aggregated Items Title:** NCR IADS

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BCS M/S Recurring	A		-	-	10.026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BCS M/S Non-Recurring	A		-	-	0.877	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NCR-IADS Non-Recurring	A		-	-	1.993	-	-	1.502	-	-	0.100	-	-	2.398	-	-	-	-	-	2.398
PMA	A		-	-	1.513	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	14.409	-	-	1.502	-	-	0.100	-	-	2.398	-	-	-	-	-	2.398
Total			-	-	14.409	-	-	1.502	-	-	0.100	-	-	2.398	-	-	-	-	-	2.398

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

Remarks:

Battle Control System program has no Air National Guard (ANG) and the Air force Reserve (AFR) Component Splits.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833040 / Theater Air Control Sys Improvements

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0207412F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	50.033	22.710	1.163	-	1.163	14.413 ^(a)	12.134 ^(b)	2.872 ^(c)	2.922 ^(d)	-	106.247 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	50.033	22.710	1.163	-	1.163	14.413	12.134	2.872	2.922	-	106.247
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	50.033	22.710	1.163	-	1.163	14.413	12.134	2.872	2.922	-	106.247

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

PE 0207412F CONTROL AND REPORTING CENTER (CRC)

The Control and Reporting Center (CRC) program element provides for integration of new capabilities, upgrades, and modifications. Funding may be used to address Diminishing Manufacturing Sources (DMS) issues. The 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. These efforts include, but are not limited to, the modification of the AN/TYQ-23A(V)1 Operations Module (OM), the AN/TRC-213/214 Remote Radio Secure Voice System (RRSVS) and the Joint Tactical Information Distribution System (JTIDS) Module (JM) Link 16 Upgrade.

AN/TYQ-23A(V)1 OM is a low density/high demand (LD/HD), rapidly deployable, ground-based C2 asset. This automated, computer-based information system provides operators the real-time battlespace picture necessary to plan, direct, and control tactical air operations and airspace management tasks. In order to meet warfighter requirements, incremental updates are required. For example, these improvements will add Secret Internet Protocol Router Network (SIPRnet), Mode 5 Integration, improved data links, Multiple Source Correlator Tracker upgrades, limited battle management for contested environs, and cyber security upgrades, Cross Domain Solution (CDS). Modifications will also be required to integrate it with the Three Dimensional Expeditionary Long Range Radar (3DELRR). AN/TRC-213/214 RRSVS is a voice radio and OM-interface unit. The RRSVS allows real-time, secure voice communications between aircraft and battle management C2 operators in the CRC. Everything over Internet Protocol (EoIP) which is used for external communications, Mobile User Objective System (MUOS), and Integrated Waveform will also be integrated into a future RRSVS upgrade. JM Link 16 Upgrade will provide for crypto modernization and will meet FAA mandated frequency re-mapping requirements and stand up of organic support for both software and hardware.

In 4th quarter of FY 2016 the entire program including SPM responsibilities transitions to HBZ at Hill AFB, UT.

Funding for this exhibit contained in PE 0207412F.

The FY 2017 funding request was reduced by \$27.177 million to account for the availability of prior year execution balances.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF Quantity	5	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs **P-1 Line Item Number / Title:** 833040 / Theater Air Control Sys Improvements

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0207412F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
	Total Obligation Authority	42.453	8.799	0.813	-	0.813	-	-	-	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.580	13.911	0.350	-	0.350	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
Total:	Quantity	5	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	50.033	22.710	1.163	-	1.163	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs **P-1 Line Item Number / Title:** 833040 / Theater Air Control Sys Improvements

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0207412F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Control and Reporting Center (CRC)			- / 0.000	- / 14.803	- / 4.239	- / 0.313	- / -	- / 0.313
P-40a	Control and Reporting Center (CRC)			- / 0.000	- / 35.230	- / 18.471	- / 0.850	- / -	- / 0.850
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 50.033	- / 22.710	- / 1.163	- / -	- / 1.163

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Control and Reporting Center (CRC)			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Control and Reporting Center (CRC)			- / -	- / -	- / -	- / -	- / -	- / 54.551
P-40	Total Gross/Weapon System Cost			- / 14.413	- / 12.134	- / 2.872	- / 2.922	- / -	- / 106.247

*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 0207412F CONTROL AND REPORTING CENTER (CRC)

FY17 funding supports:

a. OPERATIONS MODULE MODERNIZATION (OM Mod). Upgrades include, but are not limited to the following: replacing legacy computer and software with a Commercial Off-the-Shelf (COTS)-based architecture, increasing system capacities as outlined in the OM Mod Functional Capabilities Document (FCD), both OM Mod and Increment 1, and integrating it with external operator workstations. OM Mod (AN/TYQ-23A(V)1) will have the ability to assign, monitor, and/or simultaneously transmit on multiple remote secure radios. Also includes upgrades to cyber security (CDS).

b. SUPPORT: (OM Mod, RRSVS, and TPS-75) Includes efforts, but not limited to, Software Integrated Laboratory (SIL) development/maintenance, Interim Contractor Support (ICS), Direct Mission Support (DMS) and Program Management Administration (PMA) activities in support of CRC.

Efforts with funding starting in FY 2018 through FY 2021 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 2018 Cost Delta: 14.413 million
- (b) FY 2019 Cost Delta: 12.134 million
- (c) FY 2020 Cost Delta: 2.872 million
- (d) FY 2021 Cost Delta: 2.922 million
- (e) FY Total Cost Delta: 51.696 million

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833040 / Theater Air Control Sys Improvements **Aggregated Items Title:** Control and Reporting Center (CRC)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Control and Reporting Center (CRC)																				
AN/TRC-213/214 RRSVS 3.2	A		-	-	-	2.003	5	10.014	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		5	10.014		-	-		-	-		-	-		-	-
ICS Labor CRC	A		-	-	-		-	1.714	-	-	1.835		-	-	0.200		-	-		0.200
<i>Secondary Distribution</i>																				
AF				-	-		-	1.714		-	1.835		-	0.200		-	-		-	0.200
PMA- Contractor Services CRC	A		-	-	-		-	0.957	-	-	0.296		-	-	0.113		-	-		0.113
<i>Secondary Distribution</i>																				
AF				-	-		-	0.957		-	0.296		-	0.113		-	-		-	0.113
Direct Mission Support	A		-	-	0.000		-	2.118	-	-	2.108		-	-		-	-		-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	2.118		-	2.108		-	-		-	-		-	-
Subtotal: Control and Reporting Center (CRC)			-	-	0.000		-	14.803	-	-	4.239		-	-	0.313		-	-		0.313
Total			-	-	0.000		-	14.803	-	-	4.239		-	-	0.313		-	-		0.313

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

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833040 / Theater Air Control Sys Improvements						Aggregated Modification Items Title: Control and Reporting Center (CRC)							

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
TACSI1 / THEATER AIR CONTROL SYSTEM IMPROVEMENT MOD			-	-	-	-	-	35.230	-	-	18.471	-	-	0.850	-	-	-	-	-	0.850
<i>Secondary Distribution</i>																				
AF				-	-		-	27.650		-	4.560		-	0.500		-	-		-	0.500
AFNG				-	-		-	7.580		-	13.911		-	0.350		-	-		-	0.350
Total			-	-	0.000	-	-	35.230	-	-	18.471	-	-	0.850	-	-	-	-	-	0.850

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
TACSI1 / THEATER AIR CONTROL SYSTEM IMPROVEMENT MOD			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54.551
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
AFNG				-	-		-	-		-	-		-	-		-	-		-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54.551

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
TACSI1 / THEATER AIR CONTROL SYSTEM IMPROVEMENT MOD	TACSI1	Other

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	16.309	21.511	21.667	-	21.667	23.725 ^(a)	20.283 ^(b)	21.737 ^(c)	22.127 ^(d)	-	147.359 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	16.309	21.511	21.667	-	21.667	23.725	20.283	21.737	22.127	-	147.359
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	16.309	21.511	21.667	-	21.667	23.725	20.283	21.737	22.127	-	147.359

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	0.100	0.100	-	0.100	0.100	0.100	0.102	0.102	-	0.604
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

PE 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. Program Management Administration 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-C (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): Commercial off-the-shelf (COTS) vertical incidence radar that obtains measurements of the ionosphere from directly overhead in the medium and high frequency radio bands.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833070 / Weather Observation Forecast

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 **Item MDAP/MAIS Code(s):** N/A

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)--Provides atmospheric, space, and climatological data analysis capabilities within the AF Weather production center to generate products required by AF and Army operational units worldwide. Additionally, WDA provides data storage and network infrastructure supporting production, development, and testing activities and transport of data among multiple nodes and classification levels.

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.

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.

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

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	3	4	4	-	4	4	4	4	4
	Total Obligation Authority	16.309	20.425	20.295	-	20.295	23.725	20.283	21.737	22.127
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.086	1.372	-	1.372	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	3	4	4	-	4	4	4	4	4
	Total Obligation Authority	16.309	21.511	21.667	-	21.667	23.725	20.283	21.737	22.127

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	FMQ-23 / JET		A	- / -	- / 6.221	- / 5.103	- / 3.828	- / -	- / 3.828
P-40a	NEXION/MOK/UAFO			- / -	- / 3.000	- / 3.000	- / 2.823	- / -	- / 2.823
P-40a	WOF			- / 0.000	- / 1.302	- / 4.583	- / 4.228	- / -	- / 4.228
P-3a	1 / WDA (Capability Improvement)			- / -	- / 5.786	- / 8.825	- / 10.788	- / -	- / 10.788
P-40	Total Gross/Weapon System Cost			- / -	- / 16.309	- / 21.511	- / 21.667	- / -	- / 21.667

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	FMQ-23 / JET		A	- / -	- / -	- / -	- / -	- / -	- / -
P-40a	NEXION/MOK/UAFO			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	WOF			- / 4.046	- / 4.234	- / 4.310	- / 4.353	- / -	- / 27.056
P-3a	1 / WDA (Capability Improvement)			- / 13.790	- / 11.215	- / 11.708	- / 12.829	- / -	- / 74.941
P-40	Total Gross/Weapon System Cost			- / 23.725	- / 20.283	- / 21.737	- / 22.127	- / -	- / 147.359

*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 0305111F WEATHER SERVICE

1. Weather Data Collection:

A. AN/FMQ-23: 6 fixed units are being acquired in FY17.

B. Next Generation Ionosonde (NEXION): 2 NEXION systems will be acquired in FY17.

2. Weather Data Analysis and Dissemination:

A. WDA: FY17 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. 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.

3. Weather Forecasting:

A. NWM: FY17 funding will procure computer servers, processors, and high-capacity storage to expand Product Suite 10 to support advanced scientific numerical weather modeling, and improve worldwide forecast capability.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs		P-1 Line Item Number / Title: 833070 / Weather Observation Forecast
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	Item MDAP/MAIS Code(s): N/A	
4. Product Tailoring/Warfighter Applications: A. JET: FY17 funding will procure integrated computer hardware and software suites and associated systems interfaces for operational weather support (from DoD Data Centers 14861, 17037, 17038, and 14866) at fixed and deployed AF, Army, and SOF locations in the continental United States and overseas. Efforts with funding starting in FY 2018 through FY 2021 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: <ul style="list-style-type: none">(a) FY 2018 Cost Delta: 5.889 million(b) FY 2019 Cost Delta: 4.834 million(c) FY 2020 Cost Delta: 5.719 million(d) FY 2021 Cost Delta: 4.945 million(e) FY Total Cost Delta: 45.362 million		

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833070 / Weather Observation Forecast **Item Number / Title [DODIC]:** - / FMQ-23 / JET

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	6.221	5.103	3.828	-	3.828	-	-	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	6.221	5.103	3.828	-	3.828	-	-	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	6.221	5.103	3.828	-	3.828	-	-	-	-	-	-

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	1.150	-	-	-	-	-	-	-	-	-	-	-
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
FMQ-23	-	-	-	0.191	5	0.957	0.250	6	1.500	0.250	4	1.000	-	-	-	0.250	4	1.000
JET	-	-	-	-	-	3.652	-	-	1.547	-	-	0.075	-	-	-	-	-	0.075
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	4.609	-	-	3.047	-	-	1.075	-	-	-	-	-	1.075
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	4.609	-	-	3.047	-	-	1.075	-	-	-	-	-	1.075
Support - Support End Item Cost																		
TESTING FMQ-23	-	-	-	-	-	0.004	-	-	0.054	-	-	0.055	-	-	-	-	-	0.055
INTERIM CONTRACTOR SUPPORT LABOR FMQ-23	-	-	-	-	-	0.054	-	-	0.081	-	-	0.064	-	-	-	-	-	0.064
PROGRAM MANAGEMENT ADMINISTRATION CONTRACTOR SERVICES FMQ-23	-	-	-	-	-	0.873	-	-	0.546	-	-	0.760	-	-	-	-	-	0.760
PROGRAM MANAGEMENT ADMINISTRATION CONTRACTOR SERVICES JET	-	-	-	-	-	0.325	-	-	0.904	-	-	0.845	-	-	-	-	-	0.845
PROGRAM MANAGEMENT ADMINISTRATION	-	-	-	-	-	0.040	-	-	0.056	-	-	0.058	-	-	-	-	-	0.058

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833070 / Weather Observation Forecast						Item Number / Title [DODIC]: - / FMQ-23 / JET					
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
OTHER GOVERNMENT SERVICES JET																		
DIRECT MISSION SUPPORT CONTRACTOR SERVICES FMQ-23	-	-	-	-	-	0.210	-	-	0.250	-	-	0.802	-	-	-	-	-	0.802
DIRECT MISSION SUPPORT CONTRACTOR SERVICES JET	-	-	-	-	-	0.081	-	-	0.104	-	-	0.107	-	-	-	-	-	0.107
PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENT SERVICES FMQ-23	-	-	-	-	-	0.025	-	-	0.061	-	-	0.062	-	-	-	-	-	0.062
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	1.612	-	-	2.056	-	-	2.753	-	-	-	-	-	2.753
Gross/Weapon System Cost	-	-	-	-	-	6.221	-	-	5.103	-	-	3.828	-	-	-	-	-	3.828
Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
FMQ-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - Support End Item Cost																		
TESTING FMQ-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERIM CONTRACTOR SUPPORT LABOR FMQ-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PROGRAM MANAGEMENT ADMINISTRATION CONTRACTOR SERVICES FMQ-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PROGRAM MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833070 / Weather Observation Forecast **Item Number / Title [DODIC]:** - / FMQ-23 / JET

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

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ADMINISTRATION CONTRACTOR SERVICES JET																		
PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENT SERVICES JET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIRECT MISSION SUPPORT CONTRACTOR SERVICES FMQ-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIRECT MISSION SUPPORT CONTRACTOR SERVICES JET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENT SERVICES FMQ-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	6.221	4.017	2.456	-	2.456	2.008	-	-	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.086	1.372	-	1.372	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	6.221	5.103	3.828	-	3.828	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833070 / Weather Observation Forecast **Aggregated Items Title:** NEXION/MOK/UAF0

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																				
NEXION	A		-	-	-	0.275	3	0.825	0.250	2	0.500	0.250	2	0.500	-	-	-	0.250	2	0.500
<i>Secondary Distribution</i>																				
AF			-	-	-	-	3	0.825	-	2	0.500	-	2	0.500	-	-	-	-	2	0.500
Mobile Observing Kit (formerly REOS)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Upper Air Follow On	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - Hardware End Item Cost			-	-	-	-	-	0.825	-	-	0.500	-	-	0.500	-	-	-	-	-	0.500
Support - Support End Item Cost																				
INSTALLATION NEXION	A		-	-	-	-	-	1.705	1.050	2	2.100	0.962	2	1.923	-	-	-	0.962	2	1.923
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.705	-	2	2.100	-	2	1.923	-	-	-	-	2	1.923
PROGRAM MANAGEMENT ADMINISTRATION CONTRACTOR SERVICES NEXION	A		-	-	-	-	-	0.425	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.425	-	-	-	-	-	-	-	-	-	-	-	-
PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENTS SERVICES NEXION	A		-	-	-	-	-	0.045	-	-	0.400	-	-	0.400	-	-	-	-	-	0.400
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.045	-	-	0.400	-	-	0.400	-	-	-	-	-	0.400
Subtotal: Support - Support End Item Cost			-	-	-	-	-	2.175	-	-	2.500	-	-	2.323	-	-	-	-	-	2.323
Total			-	-	-	-	-	3.000	-	-	3.000	-	-	2.823	-	-	-	-	-	2.823
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																				
NEXION	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833070 / Weather Observation Forecast **Aggregated Items Title:** NEXION/MOK/UAF0

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				2	0.500		2	0.500		2	0.500		2	0.500		-	-		-	-
Mobile Observing Kit (formerly REOS)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	0.690		-	0.695		-	0.702		-	-		-	-
Upper Air Follow On	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	0.814		-	0.822		-	-		-	-
Subtotal: Hardware - Hardware End Item Cost			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - Support End Item Cost																				
INSTALLATION NEXION	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				2	2.981		2	3.244		2	3.310		2	2.521		-	-		-	-
PROGRAM MANAGEMENT ADMINISTRATION CONTRACTOR SERVICES NEXION	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
PROGRAM MANAGEMENT ADMINISTRATION OTHER GOVERNMENTS SERVICES NEXION	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	0.400		-	0.400		-	0.400		-	0.400		-	-		-	-
Subtotal: Support - Support End Item Cost			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3							P-1 Line Item Number / Title: 833070 / Weather Observation Forecast							Aggregated Modification Items Title: WOF					

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total			
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
WOF2 / NWM			-	-	-	-	-	1.302	-	-	4.583	-	-	4.228	-	-	-	-	-	4.228	
<i>Secondary Distribution</i>																					
AF				-	-	-	-	1.302			4.583			4.228			-	-	-	-	4.228
Total			-	-	0.000	-	-	1.302	-	-	4.583	-	-	4.228	-	-	-	-	-	4.228	
Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost			
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
WOF2 / NWM			-	-	4.046	-	-	4.234	-	-	4.310	-	-	4.353	-	-	-	-	-	27.056	
<i>Secondary Distribution</i>																					
AF				-	4.046		-	4.234		-	4.310		-	4.353		-	-	-	-	-	
Total			-	-	4.046	-	-	4.234	-	-	4.310	-	-	4.353	-	-	-	-	-	27.056	

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 / NWM	NWM	Capability Improvement

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Exhibit P-3a, Individual Modification: PB 2017 Air Force								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3				P-1 Line Item Number / Title: 833070 / Weather Observation Forecast				Modification Number / Title: 1 / WDA				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	5.786	8.825	10.788	-	10.788	13.790	11.215	11.708	12.829	-	74.941
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	5.786	8.825	10.788	-	10.788	13.790	11.215	11.708	12.829	-	74.941
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	5.786	8.825	10.788	-	10.788	13.790	11.215	11.708	12.829	-	74.941

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Improves capability by updating the Air Force Weather Consolidated Network, Cross Domain, Solution, and Enterprise Storage Solution systems required for 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 data.

Milestone/Development Status

Inc 4 Build C

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.786	8.825	10.788	-	10.788	13.790	11.215	11.708	12.829
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.786	8.825	10.788	-	10.788	13.790	11.215	11.708	12.829

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3					P-1 Line Item Number / Title: 833070 / Weather Observation Forecast					Modification Number / Title: 1 / WDA			
Models of Systems Affected: WDA				Modification Type: Capability Improvement				Related RDT&E PEs: 0305111F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: Weather Data Analysis</i>													
B Kits													
Recurring													
Weather Data Analysis:EQUIPMENT Group B (Active)	- / -	1 / 5.786	1 / 8.825	1 / 10.788	- / -	1 / 10.788	1 / 13.790	1 / 11.215	1 / 11.708	1 / 12.829	- / -	7 / 74.941	
<i>Subtotal: Recurring</i>	- / -	- / 5.786	- / 8.825	- / 10.788	- / -	- / 10.788	- / 13.790	- / 11.215	- / 11.708	- / 12.829	- / -	- / 74.941	
<i>Subtotal: Weather Data Analysis</i>	- / -	- / 5.786	- / 8.825	- / 10.788	- / -	- / 10.788	- / 13.790	- / 11.215	- / 11.708	- / 12.829	- / -	- / 74.941	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / 5.786	- / 8.825	- / 10.788	- / -	- / 10.788	- / 13.790	- / 11.215	- / 11.708	- / 12.829	- / -	- / 74.941	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	5.786	8.825	10.788	-	10.788	13.790	11.215	11.708	12.829	-	74.941	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833070 / Weather Observation Forecast	Modification Number / Title: 1 / WDA
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Modification Item 1 of 1: Weather Data Analysis

Manufacturer Information

Manufacturer Name: Raytheon Intelligence and Information Systems	Manufacturer Location: Omaha, NE
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Administrative Leadtime (<i>in Months</i>): 4	Production Leadtime (<i>in Months</i>): 5
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Feb 2015	May 2016	Apr 2017	Jun 2018	Apr 2019	Apr 2020	Nov 2020
Delivery Dates	Jul 2015	Oct 2016	Sep 2017	Nov 2018	Sep 2019	Sep 2020	Apr 2021

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 7
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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833140 / Strategic Command And Control

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.649	146.759	286.980	39.803	-	39.803	54.268	25.843	14.830	15.095	-	584.227
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.649	146.759	286.980	39.803	-	39.803	54.268	25.843	14.830	15.095	-	584.227
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.649	146.759	286.980	39.803	-	39.803	54.268	25.843	14.830	15.095	-	584.227

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

B-2 Squadrons PE 0101127F - 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).

Strat War Planning System - USSTRATCOM PE 0101313F - P-40A
PE 0101313F - STRATEGIC WAR PLANNING SYSTEM - USSTRATCOM:

Funding for this program has moved to WSC 833560

Worldwide Joint Strategic Communications PE 0101316F - P-40A
PE 0101316F EMERGENCY ACTION MESSAGE (EAM) PROCESSING EQUIPMENT

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs		P-1 Line Item Number / Title: 833140 / Strategic Command And Control
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	Item MDAP/MAIS Code(s): N/A	
<p>Emergency Action Messages are highly structured, authenticated messages primarily used in the command and control of nuclear forces. They are disseminated over numerous survivable and non-survivable 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 (AAE), 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 support 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, Emergency Action Messages, 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. Funding for this exhibit contained in PE 0101316F.</p> <p>Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities) PE 0208059F - P-40A PE 0208059F CYBER COMMAND ACTIVITIES:</p> <p>US Cyber Command (USCYBERCOM) plans, coordinates, integrates, synchronizes, and conducts activities to: direct the operations and defense of specified Department of Defense information networks and; prepare to, and when directed, conduct full-spectrum military cyberspace operations in order to enable actions in all domains, ensure US/Allied freedom of action in cyberspace and deny the same to our adversaries. Emphasis is on providing component and subsystem maturity prior to integration in major and complex systems and may involve risk reduction initiatives. Cyberspace Situational Awareness 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.</p> <p>Command, Control, Communication, and Computers (C4) - STRATCOM PE 0303255F - P-40A PE 0303255F - SERVICE SUPPORT TO USSTRATCOM - C4:</p> <p>5. SERVICE SUPPORT TO USSTRATCOM - C4:</p> <p>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.</p> <p>b. USSTRATCOM C2 SYSTEMS LIFECYCLE HARDWARE MANAGEMENT: This effort provides the C2 infrastructure and hardware to acquire, process, and deliver information, as needed, to enhance decision making for USSTRATCOM and Air Force Space Command (AFSPC). This effort employs a set of underlying information services, technologies, and tools that enable the Commander of USSTRATCOM to achieve the broad operational warfighting capabilities. The effort adds capability as it builds to a final architecture. The cyber architecture is a collection of distributed databases and applications, integrated through a grid of supporting services. This effort was previously referred to as "C2 Modernization" and is not a new start.</p> <p>c. ANALYSIS AND TARGETING - JOINT WARFARE ANALYSIS CENTER (JWAC): effort provides the hardware that enables the JWAC to develop and recommend strategic technical solutions. JWAC coordinates directly with the staffs of all Unified Commands, Department of Defense (DoD) elements, Combatant Commands, military services, and other government departments and agencies to respond to crises.</p> <p>d. FORCE SURVIVABILITY, ANALYSIS, AND MANAGEMENT SYSTEM (FSAM): FSAM is a decision support system and is designed to provide the commander with Force Management (pre attack) and Force Survival (post attack) information needed to ensure survival of strategic forces. FSAM provides the commander vital decision making data by correlating strategic force status reported by Force Status Reporting (FSR) with missile attack warning information. Processing and Display Subsystem - Migration (PDS-M) will continue to provide the commander with missile attack warning information</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs		P-1 Line Item Number / Title: 833140 / Strategic Command And Control
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	Item MDAP/MAIS Code(s): N/A	

e. GLOBAL DISTRIBUTED COMMAND AND CONTROL (GDC2): Detailed information is classified and will be provided on a need to know basis. For further information please contact the Strategic C2 Systems Branch (SAF/AQID) at (202) 404-3405.

f. USSTRATCOM REPLACEMENT FACILITY FIT-OUT: USSTRATCOM is tasked with the vital roles of strategic deterrence, space operations, and cyberspace operations in our nation's defense. Nuclear, space, and network command and control operations require secure and survivable infrastructure. The facility includes features and capabilities such as secure High-Altitude Electromagnetic Pulse (HEMP) Shielded Command and Control Center, mainframe computer data centers, multiple 24/7 mission operations centers, storage and maintenance areas, labs/workrooms, back-up generators, Uninterruptible Power Source, Technical Control Facility, and Fiber Ring.

Funding for this exhibit contained in PE 0303255F.

Note: The FY17 funding request for Service Support to USSTRATCOM - C4, PE 0303255F, was reduced \$40 million to account for the availability of prior year execution balances

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833140 / Strategic Command And Control

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	B-2 Squadrons			- / 0.649	- / 0.495	- / 0.493	- / 0.496	- / -	- / 0.496
P-40a	Worldwide Joint Strategic Communications			- / 0.000	- / 5.800	- / 0.248	- / 0.246	- / -	- / 0.246
P-40a	Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)			- / -	- / 0.975	- / 7.948	- / 7.872	- / -	- / 7.872
P-40a	Command, Control, Communication, and Computers (C4) - STRATCOM			- / -	- / 139.489	- / 278.291	- / 31.189	- / -	- / 31.189
P-40	Total Gross/Weapon System Cost			- / 0.649	- / 146.759	- / 286.980	- / 39.803	- / -	- / 39.803

*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:

B-2 Squadrons PE 0101127F - 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.

Strat War Planning System - USSTRATCOM PE 0101313F - P-40A
PE 0101313F STRATEGIC WAR PLANNING SYSTEM - USSTRATCOM

Funding for this program has moved to WSC 833560

Worldwide Joint Strategic Communications PE 0101316F - P-40A
PE 0101316F EMERGENCY ACTION MESSAGE (EAM) PROCESSING EQUIPMENT

FY17 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.

Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities) PE 0208059F - P-40A
PE 0208059F CYBER COMMAND ACTIVITIES:

FY17 funding will be used to buy COTS IT equipment in support of Base communications infrastructure (e.g., servers, routers, Local Area Networks (LANs), End Building Node (EBN) hardware) supports ongoing USCYBERCOM activities.

Base communications infrastructure (e.g., servers, routers, Local Area Networks (LANs), Audio Visual / Teleconferencing equipment etc.)

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs		P-1 Line Item Number / Title: 833140 / Strategic Command And Control
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	Item MDAP/MAIS Code(s): N/A	
<p>Command, Control, Communication, and Computers (C4) - STRATCOM PE 0303255F - P-40A PE 0303255F SERVICE SUPPORT TO STRATCOM, COMMAND, CONTROL, COMMUNICATION AND COMPUTER (C4):</p> <p>a. NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES): FY17 funding continues procurement of hardware for the Fact-of-Life (FoL) update of the NPES operational environment to support the DoD migration into the X86 environment. FY17 satisfies communication suites life-cycle replacement at detached operational sites. Hardware procurement will also support mobile platforms as we introduce X86 blades to the platform server configuration.</p> <p>b. USSTRATCOM C2 SYSTEMS LIFECYCLE HARDWARE MANAGEMENT: FY 17 continues the phased update of the full C2 LAN Back Up and Recovery System, update of the Mass Storage appliances on the C2 LAN and the Top Secret LAN, life-cycle replacement of C2 application and database servers, and other ongoing activities.</p> <p>c. ANALYSIS AND TARGETING - JOINT WARFARE ANALYSIS CENTER (JWAC): FY17 funding will continue life cycle replacement of critical analytical software and hardware for strategic solutions</p> <p>d. FORCE SURVIVABILITY, ANALYSIS, AND MANAGEMENT (FSAM). FY17 funding continues hardware/software updates for FSAM as well as the decision making tools of Force Status Readiness and Force Protection applications that feed FSAM.</p> <p>e. GLOBAL DISTRIBUTED COMMAND AND CONTROL (GDC2): Detailed information is classified and will be provided on a need to know basis. For further information please contact the Strategic C2 Systems Branch (SAF/AQID) at (202) 404-3405.</p> <p>f. USSTRATCOM REPLACEMENT FACILITY FIT-OUT: USSTRATCOM Replacement Facility: FY17 will focus on major areas: 1) Continue the procurement of Network/Communications, Data Center Server/ Client/storage, Audio Visual/Video Tele Conferencing hardware, Command and Control mission systems hardware, software, and services to implement the new Command and Control Facility infrastructure; 2) Completion of the Technical Control Facility; and, 3) Complete the procurement of horizontal premise cabling and zone distribution boxes (Multimode), wireless infrastructure, and end user VOIP cabling for the communications network within the facility.</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833140 / Strategic Command And Control **Aggregated Items Title:** B-2 Squadrons

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
B-2 Weapon System Support Center (WSSC) Hardware	A		-	-	0.649	-	-	0.495	-	-	0.493	-	-	0.496	-	-	-	-	-	0.496
Subtotal: Uncategorized			-	-	0.649	-	-	0.495	-	-	0.493	-	-	0.496	-	-	-	-	-	0.496
Total			-	-	0.649	-	-	0.495	-	-	0.493	-	-	0.496	-	-	-	-	-	0.496

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833140 / Strategic Command And Control						Aggregated Items Title: Worldwide Joint Strategic Communications							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Defense Injection/ Reception Emergency Action Message Command and Control Terminal (DIRECT) System	A		-	-	-	5.800	1	5.800	-	-	-	-	-	-	-	-	-	-	-	-
Strategic Automated Command Control Systems (SACCS)	A		-	-	0.000	-	-	-	0.004	62	0.248	0.004	62	0.246	-	-	-	0.004	62	0.246
Subtotal: Uncategorized			-	-	0.000	-	-	5.800	-	-	0.248	-	-	0.246	-	-	-	-	-	0.246
Total			-	-	0.000	-	-	5.800	-	-	0.248	-	-	0.246	-	-	-	-	-	0.246

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

Remarks:
\$5.8M FY15 funding was added in the omnibus reprogramming. This funding was used to procure one DIRECT system in support of USAFE.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833140 / Strategic Command And Control						Aggregated Items Title: Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
COTS IT Equipment for cyber SSA	A		-	-	-	-	-	0.975	-	-	7.948	7.872	1	7.872	-	-	-	7.872	1	7.872
Subtotal: Uncategorized			-	-	-	-	-	0.975	-	-	7.948	-	-	7.872	-	-	-	-	-	7.872
Total			-	-	-	-	-	0.975	-	-	7.948	-	-	7.872	-	-	-	-	-	7.872

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3							P-1 Line Item Number / Title: 833140 / Strategic Command And Control							Aggregated Items Title: Command, Control, Communication, and Computers (C4) - STRATCOM					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
NPES - COMM SYSTEM (SMART NEXT Turn-Key System)	A		-	-	-	-	-	-	-	-	-	0.300	7	2.100	-	-	-	0.300	7	2.100
NPES - RUGGEDIZED EQUIPMENT, E-4B, E-6B	A		-	-	-	0.550	2	1.100	0.400	5	2.000	-	-	-	-	-	-	-	-	-
NPES - Operational Site Refresh	A		-	-	-	-	-	-	-	-	-	0.292	1	0.292	-	-	-	0.292	1	0.292
C2 LAN Infrastructure (C2 Modernization)	A		-	-	-	-	-	-	-	-	-	3.677	1	3.677	-	-	-	3.677	1	3.677
Mass Storage Devices [Secret, TS], (C2 Modernization)	A		-	-	-	-	-	-	-	-	-	3.714	1	3.714	-	-	-	3.714	1	3.714
Net-Centricity Migration Expansion (C2 Modernization)	A		-	-	-	0.169	4	0.677	0.293	1	0.293	-	-	-	-	-	-	-	-	-
SUN/Windows servers, storage, clients etc (C2 Modernization)	A		-	-	-	0.310	2	0.620	0.500	7	3.500	-	-	-	-	-	-	-	-	-
Global Operations Center (GOC) Hardware, (C2 Modernization)	A		-	-	-	3.600	1	3.600	2.746	1	2.746	-	-	-	-	-	-	-	-	-
Miscellaneous Infrastructure and LAN Hardware, [Classified], (C2 Modernization)	A		-	-	-	4.450	1	4.450	2.832	1	2.832	-	-	-	-	-	-	-	-	-
Subordinate Organizations System Hardware, [Classified], (C2 Modernization)	A		-	-	-	2.621	1	2.621	2.550	1	2.550	-	-	-	-	-	-	-	-	-
Analysis and Targeting Systems, (C2 Modernization)	A		-	-	-	-	-	-	0.085	1	0.085	0.086	1	0.086	-	-	-	0.086	1	0.086
FSAM - Modernization Procurement	A		-	-	-	1.284	1	1.284	1.337	1	1.337	2.136	1	2.136	-	-	-	2.136	1	2.136
Global Distributed Command and Control (GDC2)	A		-	-	-	-	-	-	-	-	-	1.746	1	1.746	-	-	-	1.746	1	1.746
Node (s)	A		-	-	-	1.659	1	1.659	14.167	1	14.167	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3							P-1 Line Item Number / Title: 833140 / Strategic Command And Control							Aggregated Items Title: Command, Control, Communication, and Computers (C4) - STRATCOM					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
New Bldg Fit Out - Fiber Ring	A		-	-	-	2.794	1	2.794	-	-	-	-	-	-	-	-	-	-	-	-
New Bldg Fit Out - Transition Infrastructure	A		-	-	-	6.576	1	6.576	1.797	1	1.797	-	-	-	-	-	-	-	-	-
New Bldg Fit Out - Premise Wiring	A		-	-	-	5.000	1	5.000	35.363	1	35.363	2.289	1	2.289	-	-	-	2.289	1	2.289
New Bldg Fit Out - Electronic Security Systems	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Bldg Fit Out - Network / Communications systems	A		-	-	-	17.648	1	17.648	63.595	1	63.595	4.211	1	4.211	-	-	-	4.211	1	4.211
New Bldg Fit Out - Server / Client / Data systems hardware	A		-	-	-	20.330	1	20.330	72.668	1	72.668	3.672	1	3.672	-	-	-	3.672	1	3.672
New Bldg Fit Out - Audio Visual / VTC systems hardware	A		-	-	-	26.239	1	26.239	56.211	1	56.211	4.898	1	4.898	-	-	-	4.898	1	4.898
New Bldg Fit Out - Mission Systems hardware	A		-	-	-	24.413	1	24.413	10.023	1	10.023	1.650	1	1.650	-	-	-	1.650	1	1.650
New Bldg Fit Out - Technical Control Facility hardware / Relocation	A		-	-	-	20.478	1	20.478	9.124	1	9.124	0.718	1	0.718	-	-	-	0.718	1	0.718
Subtotal: Uncategorized			-	-	-	-	-	139.489	-	-	278.291	-	-	31.189	-	-	-	-	-	31.189
Total			-	-	-	-	-	139.489	-	-	278.291	-	-	31.189	-	-	-	-	-	31.189

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833140 / Strategic Command And Control	Aggregated Items Title: Command, Control, Communication, and Computers (C4) - STRATCOM

Remarks:

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)

Network/Communications: Crypto Gear, Storage Chassis, IA Devices, Additional Cabling, Servers, Licensing, Access Layer Switches, Network Management Software, Intrusion Prevention Systems, Proxy System, Log Reduction Systems, Blade Server Enclosures, Multi-Control Units (MCUs), VoIP Instruments, Call Managers

Server/Client/Data Hardware: Client Machines, Printers, Devices, End-user Licensing, 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, Firewalls, Antennas, Bridges, Gateways, Gatekeepers, Border Controller

Tech Control Facility Relocation: Circuits, Cabling, Specialized Racks, Patch Fields

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833160 / Cheyenne Mountain Complex

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0305903F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	35.301	36.186	24.618	-	24.618	31.130	30.880	29.888	30.425	-	218.428
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	35.301	36.186	24.618	-	24.618	31.130	30.880	29.888	30.425	-	218.428
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	35.301	36.186	24.618	-	24.618	31.130	30.880	29.888	30.425	-	218.428

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The FY17 funding request was reduced by \$3.806M to account for the availability of prior year execution balances.

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 enduring 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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 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 **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	COCOM Mobile Command and Control Centers (MCCCs)			- / 0.000	- / 20.751	- / 9.485	- / 0.573	- / -	- / 0.573
P-3a	001 / Mobile Consolidated Command Center Upgrade Block 00 (Reliability & Maintainability)			- / -	- / -	- / -	- / 7.062	- / -	- / 7.062
P-40a	NCMC - TW/AA System			- / 0.000	- / 14.550	- / 26.701	- / 0.750	- / -	- / 0.750
P-3a	002 / NORAD Cheyenne Mountain Complex Block 00 (Reliability & Maintainability)			- / -	- / -	- / -	- / 16.233	- / -	- / 16.233
P-40	Total Gross/Weapon System Cost			- / -	- / 35.301	- / 36.186	- / 24.618	- / -	- / 24.618

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	COCOM Mobile Command and Control Centers (MCCCs)			- / 7.188	- / 7.908	- / 8.047	- / 8.192	- / -	- / 62.144
P-3a	001 / Mobile Consolidated Command Center Upgrade Block 00 (Reliability & Maintainability)			- / 0.583	- / -	- / -	- / -	- / -	- / 7.645
P-40a	NCMC - TW/AA System			- / 22.609	- / 22.972	- / 21.841	- / 22.233	- / -	- / 131.656
P-3a	002 / NORAD Cheyenne Mountain Complex Block 00 (Reliability & Maintainability)			- / 0.750	- / -	- / -	- / -	- / -	- / 16.983
P-40	Total Gross/Weapon System Cost			- / 31.130	- / 30.880	- / 29.888	- / 30.425	- / -	- / 218.428

*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.

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833160 / Cheyenne Mountain Complex						Aggregated Modification Items Title: COCOM Mobile Command and Control Centers (MCCCs)							

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
002 / Mobile Consolidated Command Center Modification			-	-	-	-	-	20.751	-	-	9.485	-	-	0.573	-	-	-	-	-	0.573
Total			-	-	0.000	-	-	20.751	-	-	9.485	-	-	0.573	-	-	-	-	-	0.573
Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
002 / Mobile Consolidated Command Center Modification			-	-	7.188	-	-	7.908	-	-	8.047	-	-	8.192	-	-	-	-	-	62.144
Total			-	-	7.188	-	-	7.908	-	-	8.047	-	-	8.192	-	-	-	-	-	62.144

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
002 / Mobile Consolidated Command Center Modification	CheyenneMountainComplex	Reliability & Maintainability

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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3				P-1 Line Item Number / Title: 833160 / Cheyenne Mountain Complex				Modification Number / Title: 001 / Mobile Consolidated Command Center Upgrade Block 00				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	7.062	-	7.062	0.583	-	-	-	-	7.645
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	7.062	-	7.062	0.583	-	-	-	-	7.645
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	7.062	-	7.062	0.583	-	-	-	-	7.645
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

COMBATANT COMMANDER (COCOM), MOBILE CONSOLIDATED COMMAND CENTER (MCCC): The COCOM's MCCC provides a survivable and enduring 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 include upgrading MCCC shelters and incorporating additional C4I system capabilities via Information Technology and Communication Upgrade projects; ensuring the platform's ability to rapidly deploy, re-constitute and operate. FY17 modifications, including initial spares and test facility updates, include but are not limited to: 1) Secure voice and data communication upgrade, 2) Platform data processing, 3) Mission and support shelters upgrade, 4) Life Cycle Management Plan (LCMP) requirements, 5) Filtration system upgrade, 6) SATCOM terminal and antenna integration, 7) Message injection system upgrade, 8) Cybersecurity modernization, 9) Additional Mission and Support Shelter(s). Funding for this effort is in program element 0305903F and is funded IAW full funding policy. Program Management Administration (PMA): PMA costs to fund acquisition support/strategy, engineering and technical expertise associated with procurement activities. In addition, PMA costs will also support equipment test, travel and other program related costs associated with install of procurement equipment.

Milestone/Development Status

Sustainment

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833160 / Cheyenne Mountain Complex	Modification Number / Title: 001 / Mobile Consolidated Command Center Upgrade Block 00

Models of Systems Affected: CheyenneMountainComplex	Modification Type: Reliability & Maintainability	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Procurement												
<i>Modification Item 1 of 1: MCCC (2)</i>												
B Kits												
Recurring												
MCCC:EQUIPMENT Group B (Active)	- / -	- / -	- / -	1 / 5.345	- / -	1 / 5.345	- / -	- / -	- / -	- / -	- / -	1 / 5.345
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 5.345	- / -	- / 5.345	- / -	- / -	- / -	- / -	- / -	- / 5.345
<i>Subtotal: MCCC (2)</i>	- / -	- / -	- / -	- / 5.345	- / -	- / 5.345	- / -	- / -	- / -	- / -	- / -	- / 5.345
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / 5.345	- / -	- / 5.345	- / -	- / -	- / -	- / -	- / -	- / 5.345
Support (All Modification Items)												
PMA - Contractor Services	- / -	- / -	- / -	- / 0.190	- / -	- / 0.190	- / 0.583	- / -	- / -	- / -	- / -	- / 0.773
<i>Subtotal: Support</i>	- / -	- / -	- / -	- / 0.190	- / -	- / 0.190	- / 0.583	- / -	- / -	- / -	- / -	- / 0.773
Installation												
<i>Modification Item 1 of 1: MCCC (2)</i>	- / -	- / -	- / -	1 / 1.527	- / -	1 / 1.527	- / -	- / -	- / -	- / -	- / -	1 / 1.527
<i>Subtotal: Installation</i>	- / -	- / -	- / -	1 / 1.527	- / -	1 / 1.527	- / -	- / -	- / -	- / -	- / -	1 / 1.527
Total												
Total Cost (Procurement + Support + Installation)	-	-	-	7.062	-	7.062	0.583	-	-	-	-	7.645

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833160 / Cheyenne Mountain Complex	Modification Number / Title: 001 / Mobile Consolidated Command Center Upgrade Block 00

Modification Item 1 of 1: MCCC (2)

Manufacturer Information

Manufacturer Name: L-3 National Security Solution Inc	Manufacturer Location: Albuquerque, NM
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 20

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Jan 2017				
Delivery Dates			Sep 2018				

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	1 / 1.527	- / -	1 / 1.527	- / -	- / -	- / -	- / -	- / -	1 / 1.527
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	1 / 1.527	- / -	1 / 1.527	- / -	- / -	- / -	- / -	- / -	1 / 1.527

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4																										
In	0	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833160 / Cheyenne Mountain Complex **Aggregated Modification Items Title:** NCMC - TW/AA System

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
001 / Core C2 Enterprise Network Infrastructure and Mission Equipment			-	-	-	-	-	14.550	-	-	26.701	-	-	0.750	-	-	-	-	-	0.750
Total			-	-	0.000	-	-	14.550	-	-	26.701	-	-	0.750	-	-	-	-	-	0.750
Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
001 / Core C2 Enterprise Network Infrastructure and Mission Equipment			-	-	22.609	-	-	22.972	-	-	21.841	-	-	22.233	-	-	-	-	-	131.656
Total			-	-	22.609	-	-	22.972	-	-	21.841	-	-	22.233	-	-	-	-	-	131.656

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
001 / Core C2 Enterprise Network Infrastructure and Mission Equipment	CheyenneMountainComplex	Reliability & Maintainability

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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3				P-1 Line Item Number / Title: 833160 / Cheyenne Mountain Complex				Modification Number / Title: 002 / NORAD Cheyenne Mountain Complex Block 00				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	-	-	16.233	-	16.233	0.750	-	-	-	-	16.983
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	-	-	-	16.233	-	16.233	0.750	-	-	-	-	16.983
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	-	-	-	16.233	-	16.233	0.750	-	-	-	-	16.983
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding procures replacement for reliability and maintainability of the information systems hardware and associated systems software for the 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. The enterprise consists of two major components: mission systems (air, missile and space) and network/infrastructure systems. Mission systems include all subsystems within the sensor-to-operator messaging string (message processing, database, communications processing systems (including Sensors and Correlation Centers), C2 services, mission operations management systems, workstations, Space Defense Operations Center (SPADOC), Space Data Server (SDS), Single Integrated Space Picture (SISP), Deconfliction (DECON), Cheyenne Mountain Complex (CMC) Message Processor (CMP), Astrodynamic Workstations and Intelligence sources). Network/infrastructure systems for ITW/AA and Space (including CAVENet) 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. Funding for these efforts are in PE0305906F and are IAW full funding policy. Program Management Administration (PMA): PMA costs to fund acquisition support/strategy, engineering and technical expertise associated with procurement activities. In addition, PMA costs will also support equipment test, travel and other program related costs associated with install of procurement equipment.

Milestone/Development Status

Sustainment

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833160 / Cheyenne Mountain Complex	Modification Number / Title: 002 / NORAD Cheyenne Mountain Complex Block 00

Models of Systems Affected: NORADCheyenneMountainComplex	Modification Type: Reliability & Maintainability	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Procurement												
<i>Modification Item 1 of 1:</i> NORAD Cheyenne Mountain Complex												
B Kits												
Recurring												
NORAD Cheyenne Mountain Complex:EQUIPMENT Group B (Active)	- / -	- / -	- / -	1 / 12.586	- / -	1 / 12.586	- / -	- / -	- / -	- / -	- / -	1 / 12.586
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 12.586	- / -	- / 12.586	- / -	- / -	- / -	- / -	- / -	- / 12.586
<i>Subtotal: NORAD Cheyenne Mountain Complex</i>	- / -	- / -	- / -	- / 12.586	- / -	- / 12.586	- / -	- / -	- / -	- / -	- / -	- / 12.586
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / 12.586	- / -	- / 12.586	- / -	- / -	- / -	- / -	- / -	- / 12.586
Support (All Modification Items)												
PMA - Contractor Services	- / -	- / -	- / -	- / 0.250	- / -	- / 0.250	- / 0.750	- / -	- / -	- / -	- / -	- / 1.000
<i>Subtotal: Support</i>	- / -	- / -	- / -	- / 0.250	- / -	- / 0.250	- / 0.750	- / -	- / -	- / -	- / -	- / 1.000
Installation												
<i>Modification Item 1 of 1:</i> NORAD Cheyenne Mountain Complex	- / -	- / -	- / -	1 / 3.397	- / -	1 / 3.397	- / -	- / -	- / -	- / -	- / -	1 / 3.397
<i>Subtotal: Installation</i>	- / -	- / -	- / -	1 / 3.397	- / -	1 / 3.397	- / -	- / -	- / -	- / -	- / -	1 / 3.397
Total												
Total Cost (Procurement + Support + Installation)	-	-	-	16.233	-	16.233	0.750	-	-	-	-	16.983

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833160 / Cheyenne Mountain Complex	Modification Number / Title: 002 / NORAD Cheyenne Mountain Complex Block 00

Modification Item 1 of 1: NORAD Cheyenne Mountain Complex

Manufacturer Information

Manufacturer Name: Raytheon Company	Manufacturer Location: Colorado Springs, Co
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 20

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Jan 2017				
Delivery Dates			Sep 2018				

Installation Information

Method of Implementation: Contractor Facility

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	1 / 3.397	- / -	1 / 3.397	- / -	- / -	- / -	- / -	- / -	1 / 3.397
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	1 / 3.397	- / -	1 / 3.397	- / -	- / -	- / -	- / -	- / -	1 / 3.397

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4																										
In	0	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
P-1 Line Item Number / Title: 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	15.649	14.456	15.868	-	15.868	15.340	15.599	15.873	16.160	-	108.945
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	15.649	14.456	15.868	-	15.868	15.340	15.599	15.873	16.160	-	108.945
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	15.649	14.456	15.868	-	15.868	15.340	15.599	15.873	16.160	-	108.945

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs		P-1 Line Item Number / Title: 833170 / Mission Planning Systems
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	Item MDAP/MAIS Code(s): N/A	
<p>(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.</p> <p>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, RQ-4, C-130, HC-130, EC-130, HH-60, KC-135, KC-46, C-5, KC-10, C-17, U-2, B-52, B-2, MC-12, 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-guided 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.</p> <p>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.</p> <p>Market surveys and analysis of COTS products will be used to support procurement decisions. Funding for this exhibit is in Program Element (PE) 0208006F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833170 / Mission Planning Systems

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Mission Planning Systems			- / -	- / 15.649	- / 14.456	- / 15.868	- / -	- / 15.868
P-40	Total Gross/Weapon System Cost			- / -	- / 15.649	- / 14.456	- / 15.868	- / -	- / 15.868

*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:

FY17 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: FY17 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 C/D/E, F-16 Block 30/40/50, F-22, E-3, E-4, E-8,RC/OC-135, HH-60, HC-130, RQ-4, U-2, MC-12, F-35

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

Funding for this effort is in program element 0208006F.

2. PRECISION AERIAL DELIVERY SYSTEMS (PADS): FY17 funding will continue the procurement of Joint Precision Airdrop Systems (JPADS) hardware, software, LRU support equipment for functional checkout (i.e. Automatic Test Equipment or ATE) and other related items. Components include, but are not limited to: guided delivery vehicles (e.g. ultralight, 2K, 10K); Pressure Tolerant Disk Drives (PTDD) [including solid state and pressure sealed disk drives]; precision-guided airdrop training systems; portable data storage units, engineering/technical support, equipment storage and associated hardware warranties. Funding for this effort is in program element 0208006F.

3. PROGRAM MANAGEMENT ADMINISTRATION: FY17 funding provides program office, engineering, and other contractor support for the Mission Planning Systems (MPS) and Joint Precision Airdrop Systems (JPADS) procurement program.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 833170 / Mission Planning Systems **Aggregated Items Title:** Mission Planning Systems

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
Uncategorized																					
1. Mission Planning Systems (MPS)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
a. MPS Hardware	A		-	-	-	-	-	6.696	-	-	7.862	-	-	9.224	-	-	-	-	-	9.224	
b. MPS Program Management Administration (Contractor Services)	A		-	-	-	-	-	0.553	-	-	0.650	-	-	0.315	-	-	-	-	-	0.315	
2. Precision Aerial Delivery Systems (PADS)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
a. PADS Dropsondes	A		-	-	-	882.00	500	0.441	-	-	-	-	-	-	-	-	-	-	-	-	
b. PADS Shipping	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
c. PADS Support Services & Spares	A		-	-	-	-	-	1.593	-	-	0.100	-	-	-	-	-	-	-	-	-	
d. PADS System Engineering & Logistical Support	A		-	-	-	-	-	2.869	-	-	3.035	-	-	1.348	-	-	-	-	-	1.348	
e. PADS Testing	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
f. PADS Delivery Systems	A		-	-	-	19,416.67	144	2.796	18,076.92	78	1.410	-	-	-	-	-	-	-	-	-	
g. PADS PARANAVSYS Delivery Systems	A		-	-	-	-	-	-	-	-	-	3,149.25	67	0.211	-	-	-	-	3,149.25	67	0.211
h. PADS Delivery System Riggings & Services	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
i. Program Management Administration (Government Cost)	A		-	-	-	-	-	0.171	-	-	0.175	-	-	0.175	-	-	-	-	-	0.175	
j. Program Management Administration (Contractor Services)	A		-	-	-	-	-	0.530	-	-	0.296	-	-	0.305	-	-	-	-	-	0.305	
k. PADS Ultralight	A		-	-	-	-	-	-	32,000.00	2	0.064	19,250.00	4	0.077	-	-	-	-	19,250.00	4	0.077
l. PADS Drives & Storage Devices	A		-	-	-	-	-	-	1,115.33	685	0.764	1,108.68	3,800	4.213	-	-	-	-	1,108.68	3,800	4.213
m. Depot Equipment	A		-	-	-	-	-	-	25,000.00	4	0.100	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	15.649	-	-	14.456	-	-	15.868	-	-	-	-	-	15.868	
Total			-	-	-	-	-	15.649	-	-	14.456	-	-	15.868	-	-	-	-	-	15.868	

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 833170 / Mission Planning Systems	Aggregated Items Title: Mission Planning Systems

Remarks:

Unit costs vary because different types/configurations of equipment are being procured.

Mission Planning Systems (MPS) and Precision Aerial Delivery Systems (PADS) components are procured as commercial-of-the-shelf (COTS) equipment using various contracting methods, vehicles and agencies. Items are procured annually via Delivery Orders (DOs) on a variety of contract vehicles (e.g. Blanket Purchase Agreements (BPAs), Indefinite Delivery Indefinite Quantity (IDIQ) contracts, and GSA and NASA SEWP IV Contract schedules) and through agencies such as AFWAY/NETCENTS II (Gunter AFB).

Mission Planning Systems (MPS) assets are centrally managed by the MPS System Support Facility (SSF) at Hill AFB.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs **P-1 Line Item Number / Title:** 833440 / Drug Interdiction Spt

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0201110F

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	20.405	-	-	-	-	-	-	-	-	-	20.405
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	20.405	-	-	-	-	-	-	-	-	-	20.405
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	20.405	-	-	-	-	-	-	-	-	-	20.405

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding supports drug interdiction and counter-drug activities.

Funding for this exhibit contained in PE 0201110F.

Justification:

No FY17 funds requested.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
833560 / Integrated Strat Plan & Analy Network (ISPAN)

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	9.060	9.597	9.331	-	9.331	9.100	8.980	9.138	9.302	-	64.508
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	9.060	9.597	9.331	-	9.331	9.100	8.980	9.138	9.302	-	64.508
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	9.060	9.597	9.331	-	9.331	9.100	8.980	9.138	9.302	-	64.508

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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.

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 weaponing. 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 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.

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 manpower to install and configure the hardware systems to provide an incremental and efficient replacement of critical infrastructure components as they become obsolete. Hardware and software procured within the program is used to support all ISPAN program increments.

Funding for this exhibit is contained in Program Element 0101313F.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs **P-1 Line Item Number / Title:** 833560 / Integrated Strat Plan & Analy Network (ISPAN)

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Integrated Strat Plan & Analy Network (ISPAN)			- / -	- / 9.060	- / 9.597	- / 9.331	- / -	- / 9.331
P-40	Total Gross/Weapon System Cost			- / -	- / 9.060	- / 9.597	- / 9.331	- / -	- / 9.331

*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:
 FY17 funding continues the life-cycle procurement of commercial-based hardware and software components for the ISPAN mission system which consists of the Mission Planning and Analysis System (MPAS) and the Global Adaptive Planning Collaborative Information Environment (GAP CIE) efforts. Funding procures mission system infrastructure, architecture, and related support components. This includes COTS-based hardware and software for an operational capability lab environment to certify ISPAN applications for operational use. Funding also provides a secure cross-domain security solution capability to enable automated data transfers between multi-level networks supporting planners worldwide on multiple enclaves. It allows for the procurement of items such as (but are not limited to) application servers, switches, storage area network (SAN), backup and recovery systems, guard solution software and other articles that will provide a secure Cross Domain Security Solution (CDSS) capability, and the life-cycle replacement of Government Furnished Equipment (GFE) at development contractor sites. Funding also provides for procurement of virtualization technology environments and distributed operations capability to support joint warfighters across geographically separated locations. Finally, funding provides for the initial migration of the ISPAN mission system to the new USSTRATCOM Command and Control Facility.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3						P-1 Line Item Number / Title: 833560 / Integrated Strat Plan & Analy Network (ISPAN)						Aggregated Items Title: Integrated Strat Plan & Analy Network (ISPAN)							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
ISPAN Mission Systems Hardware	A		-	-	-	-	-	-	-	-	-	1.450	1	1.450	-	-	-	1.450	1	1.450
End-point Computing Devices	A		-	-	-	0.150	1	0.150	-	-	-	1.652	1	1.652	-	-	-	1.652	1	1.652
UNIX/SPARC-based servers	A		-	-	-	-	-	-	0.100	1	0.100	0.200	1	0.200	-	-	-	0.200	1	0.200
MPAS Virtual Servers	A		-	-	-	1.123	1	1.123	2.065	1	2.065	0.816	1	0.816	-	-	-	0.816	1	0.816
GAP CIE Deployment HW/SW	A		-	-	-	1.040	1	1.040	1.000	1	1.000	1.000	1	1.000	-	-	-	1.000	1	1.000
PRP	A		-	-	-	0.100	1	0.100	-	-	-	-	-	-	-	-	-	-	-	-
ISPAN B-Network	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ISPAN Security Enclaves (SIPR, TS/ C, & JWICS)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ISPAN Virtual Data Storage System	A		-	-	-	0.500	1	0.500	1.700	1	1.700	3.468	1	3.468	-	-	-	3.468	1	3.468
ISPAN Analysis Systems -- IWMDT and EADSIM	A		-	-	-	1.552	1	1.552	-	-	-	-	-	-	-	-	-	-	-	-
ISPAN Systems at Geographically Separated Location(s)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ISPAN Systems reconstitute at GSUs	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Block 1 Major Hardware	A		-	-	-	0.301	1	0.301	-	-	-	-	-	-	-	-	-	-	-	-
H/W and S/W to Deploy Comman Access Card System	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cross Domain Guard Solution	A		-	-	-	1.420	1	1.420	-	-	-	-	-	-	-	-	-	-	-	-
System to Ingest External Data into ISPAN	A		-	-	-	-	-	-	0.587	1	0.587	-	-	-	-	-	-	-	-	-
ISPAN Network Systems	A		-	-	-	1.000	1	1.000	-	-	-	-	-	-	-	-	-	-	-	-
Testing and Experimentation of ISPAN Mission Systems	A		-	-	-	1.129	1	1.129	1.000	1	1.000	-	-	-	-	-	-	-	-	-
ISPAN Systems for Off-Site Developers (GFE)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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

P-1 Line Item Number / Title:
833560 / Integrated Strat Plan & Analy Network (ISPAN)

Aggregated Items Title:
Integrated Strat Plan & Analy Network (ISPAN)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Enterprise Licence Agreements ISPAN Mission Systems	A		-	-	-	-	-	-	1.200	2	2.400	-	-	-	-	-	-	-	-	-
Program Management Administration (Government Cost)	A		-	-	-	-	-	0.010	-	-	0.010	-	-	0.010	-	-	-	-	-	0.010
Program Management Administration (Contractor Services)	A		-	-	-	0.245	3	0.735	0.245	3	0.735	0.245	3	0.735	-	-	-	0.245	3	0.735
USSTRATCOM C2 Building Hardware & Networks	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	9.060	-	-	9.597	-	-	9.331	-	-	-	-	-	9.331
Total			-	-	-	-	-	9.060	-	-	9.597	-	-	9.331	-	-	-	-	-	9.331

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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 Items:** N/A **Other Related Program Elements:** 0207697F, 0208087F, 0305173F, 0305174F, 0604281F, 0804752F, 0804771F, 0901279F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	30.898	40.030	29.706	41.779	-	41.779	39.420	38.054	39.443	40.217	-	299.547
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	30.898	40.030	29.706	41.779	-	41.779	39.420	38.054	39.443	40.217	-	299.547
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	30.898	40.030	29.706	41.779	-	41.779	39.420	38.054	39.443	40.217	-	299.547

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The FY17 funding request was reduced by \$3.4M to account for the availability of prior year execution balances.

Service Support to Other Core Missions - NORTHCOM PE 0201110F - P-40A

CIVIL RESPONDER COMMUNICATIONS (CRC)INTEROPERABILITY: The Civil Responder Communications capability provisions interoperable communications between a deployed Joint Task Force and federal, state, and local disaster response personnel. USNORTHCOM will use these funds to procure communications technologies that enable direct communications between military and civil command counterparts at all echelons. The collaborative requirements that this task satisfies includes shared common operational picture (COP), desktop collaboration, military and civil radio interoperability that includes encryption, and the extension of public internet and telephone service by military communications systems to the civil responders being supported. (Formerly Emergency Response Communications System (ERCS))

US Northern Command Communications PE 0201130F - 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) COMMUNICATIONS 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.

ISR Innovations PE 0207277F - P-40A

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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 Items: N/A	Other Related Program Elements: 0207697F, 0208087F, 0305173F, 0305174F, 0604281F, 0804752F, 0804771F, 0901279F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>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 gaps and/or shortfalls identified by warfighting activities. Eagle Vision provides direct downlink commercial imagery to operational commanders for mission support purposes.</p> <p>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.</p> <p>Combat Air Forces (CAF) Exercises and Readiness Training PE 0207603F - 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.</p> <p>Wargaming and Simulation Centers PE 0207605F - 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.</p> <p>Distributed Training and Exercises PE 0207697F - 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.</p> <p>AF OFFENSIVE CYBERSPACE OPERATIONS PE 0208087F - P-40A Procures student mission training systems (hardware, software, infrastructure, and facility modifications) supporting Information & Cyber Operations training needs of approximately 700 students per year.</p> <p>Air Force Communications (AIRCOM) PE 0303112F - 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.</p> <p>Security and Investigative Activities PE 0305128F - 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.</p> <p>Space and Missile Test and Evaluation Center PE 0305173F - 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.</p> <p>Space Innovation, Integration and Rapid Technology Development PE 0305174F - P-40A</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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 Items: N/A	Other Related Program Elements: 0207697F, 0208087F, 0305173F, 0305174F, 0604281F, 0804752F, 0804771F, 0901279F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>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.</p> <p>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.</p> <p>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.</p> <p>Tactical Data Networks Enterprise PE 0604281F - 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 TDL's, 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, and maritime and space-based C4ISR networks. Tactical Data Network (TDN) Planning, Analysis and Monitoring Tactical Edge Network Command and Control (PAM/TENC2) will procure and install hardware to modernize CONUS ground based TDL gateways.</p> <p>Logistics Support Activities PE 0708012F - 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.</p> <p>Joint Logistics Program - Total Asset Visibility PE 0708074F - 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.</p> <p>Recruiting Activities PE 0801711F - P-40A Air Force Recruiting and Information Support System - Legacy (AFRISS-L): AFRISS-L is a web-enabled automated information system, accessible via the Internet, used by recruiters and management personnel world-wide to gather information on prospective recruits and process them into the Air Force. It supports all Active Duty and Air Guard recruiting efforts.</p> <p>Recruit Training Units PE 0804711F - P-40A 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.</p> <p>Service Academies PE 0804721F - P-40A US AIR FORCE ACADEMY (USAFA):</p>		

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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>a. 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).</p> <p>b. CADET ADMINISTRATION MANAGEMENT INFORMATION SYSTEM (CAMIS): CAMIS is a cradle-to-grave system supporting all facets of student management including admissions, registrar, preparatory, academic, athletic, military training data from the candidate's initial application to graduation & commissioning and continuing through the military career of each cadet.</p> <p>General Skill Training PE 0804731F - P-40A TECHNICAL TRAINING MANAGEMENT SYSTEM (TTMS): TTMS provides AETC organizations with a world class commercial-off-the-shelf (COTS) / government off-the-shelf (GOTS) learning management system which supports six functions: course design and development; student evaluation; instructor management; student management; data analysis; and resource administration. TTMS is a centralized web-based system which provides productivity enhancements and higher degree of efficiency to AETC.</p> <p>Other Professional Education PE 0804752F - 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.</p> <p>Support of the Training Establishment PE 0804771F - 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.</p> <p>Facilities Operation - Administrative PE 0901279F - 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, Housing Management, Financial Management, Environmental Management, Planning, Emergency Services, Fire Operations and EOD.</p> <p>AF A1 Systems PE 0901299F - 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:</p> <p>a. MILITARY PERSONNEL DATA SYSTEM: MiIPDS 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 MiIPDS Federal Data Center Consolidation Initiative (FDCCI) compliance efforts.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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 Items:** N/A **Other Related Program Elements:** 0207697F, 0208087F, 0305173F, 0305174F, 0604281F, 0804752F, 0804771F, 0901279F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

b. AIR FORCE PERSONNEL OPERATIONS AGENCY (AFPOA) NETWORK INFRASTRUCTURE: 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.

C2ISR TDL PE 0207448F - P-40A
 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

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	1	-	1,567	-	1,567	12	13	13	13
	Total Obligation Authority	36.351	26.665	37.351	-	37.351	3.444	3.227	3.270	3.329
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	3.679	3.041	4.428	-	4.428	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
Total:	Quantity	1	-	1,567	-	1,567	12	13	13	13
Secondary Distribution	Total Obligation Authority	40.030	29.706	41.779	-	41.779	3.444	3.227	3.270	3.329

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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 Items:** N/A **Other Related Program Elements:** 0207697F, 0208087F, 0305173F, 0305174F, 0604281F, 0804752F, 0804771F, 0901279F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Service Support to Other Core Missions - NORTHCOM			- / 0.306	- / 0.476	- / -	- / -	- / -	- / -
P-40a	US Northern Command Communications			- / 5.045	- / 2.997	- / 2.917	- / 3.457	- / -	- / 3.457
P-40a	ISR Innovations			- / 3.428	- / 5.678	- / 4.701	- / 5.863	- / -	- / 5.863
P-40a	C2ISR Tactical Data Link			- / -	- / -	- / -	- / 1.580	- / -	- / 1.580
P-40a	Combat Air Forces (CAF) Exercises and Readiness Training			- / 0.166	- / 0.201	- / 0.164	- / -	- / -	- / -
P-40a	Wargaming and Simulation Centers			- / 0.447	- / 0.711	- / 0.594	- / 1.199	- / -	- / 1.199
P-40a	Distributed Training and Exercises			- / 0.241	- / 0.580	- / 0.248	- / 0.339	- / -	- / 0.339
P-40a	AF OFFENSIVE CYBERSPACE OPERATIONS			- / 1.150	- / 1.705	- / 1.329	- / 1.554	- / -	- / 1.554
P-40a	Air Force Communications (AIRCOM)			- / 0.000	- / 3.857	- / 3.953	- / -	- / -	- / -
P-40a	Security and Investigative Activities			- / 0.990	- / 1.593	- / 1.337	- / 1.800	- / -	- / 1.800
P-40a	Space and Missile Test and Evaluation Center			- / 1.038	- / 1.683	- / 1.435	- / 1.977	- / -	- / 1.977
P-40a	Space Innovation, Integration and Rapid Technology Development			- / 0.919	- / 1.289	- / 1.221	- / 1.481	- / -	- / 1.481
P-40a	Communications and Information Technology			- / -	- / -	- / -	- / 5.102	- / -	- / 5.102
P-40a	Tactical Data Networks Enterprise			- / 0.153	- / -	- / 0.002	- / 1.842	- / -	- / 1.842
P-40a	Logistics Support Activities			- / 0.492	- / 1.277	- / -	- / 1.177	- / -	- / 1.177
P-40a	Joint Logistics Program - Total Asset Visibility			- / 5.081	- / 8.162	- / 5.620	- / 5.604	- / -	- / 5.604
P-40a	Recruiting Activities			- / 0.838	- / -	- / -	- / -	- / -	- / -
P-40a	Recruit Training Units			- / 0.000	- / -	- / 0.630	- / 1.624	- / -	- / 1.624
P-40a	Service Academies			- / 2.214	- / 2.702	- / 3.227	- / 3.374	- / -	- / 3.374
P-40a	General Skill Training			- / 0.343	- / 0.289	- / 0.455	- / 0.695	- / -	- / 0.695
P-40a	Other Professional Education			- / 0.355	- / 0.429	- / 0.357	- / 0.494	- / -	- / 0.494
P-40a	Support of the Training Establishment			- / 0.722	- / 0.749	- / 0.730	- / 1.016	- / -	- / 1.016
P-40a	Facilities Operation - Administrative			- / 2.661	- / 0.500	- / -	- / -	- / -	- / -
P-40a	AF A1 Systems			- / 4.309	- / 5.152	- / 0.786	- / 1.601	- / -	- / 1.601
P-40	Total Gross/Weapon System Cost			- / 30.898	- / 40.030	- / 29.706	- / 41.779	- / -	- / 41.779

*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:
 Service Support to Other Core Missions - NORTHCOM PE 0201110F - P-40A
 No FY17 funding requested.

US Northern Command Communications PE 0201130F - P-40A

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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>a. NORAD AND NORTHCOM INTEROPERABLE COMMUNICATIONS: FY17 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.</p> <p>b. DEPLOYABLE COMMUNICATION CAPABILITY SYSTEM LIFE CYCLE MANAGEMENT: FY17 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.</p> <p>c. EARLY WARNING RADAR (EWR) COMMUNICATIONS EQUIPMENT: No FY17 funding requested</p> <p>ISR Innovations PE 0207277F - 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.</p> <p>Combat Air Forces (CAF) Exercises and Readiness Training PE 0207603F - P-40A FY17 funding procures parts for task trainers for ACC and other CAF air crews.</p> <p>Wargaming and Simulation Centers PE 0207605F - P-40A FY17 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.</p> <p>Distributed Training and Exercises PE 0207697F - P-40A AIR FORCE DISTRICT WASHINGTON: FY17 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.</p> <p>AF OFFENSIVE CYBERSPACE OPERATIONS - P-40A FY17 funds will 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.</p> <p>Air Force Communications (AIRCOM) PE 0303112F - P-40A No FY17 funding requested.</p> <p>FY16 funding totals include \$3.953M for Overseas Contingency Operations (OCO).</p> <p>Security and Investigative Activities PE 0305128F - P-40A FY17 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.</p> <p>Space and Missile Test and Evaluation Center PE 0305173F - P-40A FY17 funds will be used to purchase hardware and software to support the implementation of Multi-Mission Satellite Operations Center (MMSOC) Block 2.1.</p>		

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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, 0804752F, 0804771F, 0901279F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>Space Innovation, Integration and Rapid Technology Development PE 0305174F - P-40A FY17 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.</p> <p>Tactical Data Networks Enterprise PE 0604281F - P-40A FY17 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 TDL's, 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, and maritime and space-based C4ISR networks.</p> <p>Logistics Support Activities PE 0708012F - P-40A FY17 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.</p> <p>Joint Logistics Program - Total Asset Visibility PE 0708074F - P-40A AUTOMATIC IDENTIFICATION TECHNOLOGY (AIT): FY 17 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. FY16 dollars will be used to replace the aging Radio Frequency Identification (RFID) readers across the MAJCOMs that support the visibility of in-transit visibility cargo for contingency operations. HHTs that have been field tested among a variety of Major Commands will be purchased for execution use to include accurate asset tracking of munitions in AF inventory. The AF AIT PO will continue to sustain and expand the Enterprise Data Collection Layer Architecture that enables the functional bar code Hand Held Terminals (HHTs) to exchange critical logistics data with AF Automated Information Systems (AISs). Functional AIT tools like Combat Ammunition System AIT, AIT Point of Maintenance and Automated Inventory and Management Tool (AIMT) will continue to be implemented at AF locations worldwide.</p> <p>Recruiting Activities PE 0801711F - P-40A No FY17 funding requested.</p> <p>Recruit Training Units PE 0804711F - P-40A BASIC MILITARY TRAINING (BMT) SURVEILLANCE SECURITY SYSTEM: FY17 funding sustains camera and computer equipment, service contract and MTI screening contract. Mitigates risk and secures the physical safety of ~36K Basic Military Trainees. Effectively target limited resources to deter, detect, dissuade and hold personnel accountable in all BMT facilities.</p> <p>Service Academies PE 0804721F - P-40A US AIR FORCE ACADEMY (USAFA): (1) AIR FORCE ACADEMY COMPUTER SUPPORT: FY17 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. FY17 funds procure IT integral to the operation of each network in support of the Air Force Academy mission.</p> <p>(2) CADET ADMINISTRATION MANAGEMENT INFORMATION SYSTEM (CAMIS): FY17 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 admissions, registrar, preparatory, academic, athletic, military training data from the candidate's initial application to graduation & commissioning and continuing through the military career of each cadet.</p> <p>General Skill Training PE 0804731F - P-40A</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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 Items: N/A	Other Related Program Elements: 0207697F, 0208087F, 0305173F, 0305174F, 0604281F, 0804752F, 0804771F, 0901279F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>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.</p> <p>Other Professional Education PE 0804752F - P-40A FY17 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, CTEEx 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.</p> <p>Support of the Training Establishment PE 0804771F - P-40A FY17 funds procure 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.</p> <p>Facilities Operation - Administrative PE 0901279F - P-40A No FY17 funding requested.</p> <p>AF A1 Systems PE 0901299F - P-40A FY17 Funding supports the MiIPDS and AFPOA Network Infrastructure 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.</p> <p>1. MILITARY PERSONNEL DATA SYSTEM: MiIPDS 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 MiIPDS FDCCI compliance efforts.</p> <p>2. AIR FORCE PERSONNEL OPERATIONS AGENCY (AFPOA) NETWORK INFRASTRUCTURE: Effective FY17, 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. AFPOA also includes the following:</p> <p>a. REGIONALIZATION OF CIVILIAN PERSONNEL SUPPORT: RCPS funding supports all AF Civilian Personnel Operations to include technology refresh for hardware supporting a variety of AF personnel applications such as: Personnel Automated Records Information System and Business Objects among others. Funding also supports RCPS FDCCI compliance efforts.</p> <p>b. PERSONNEL SERVICE DELIVERY (PSD): 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.</p> <p>c. AIR FORCE PERSONNEL CENTER (AFPC): Infra Global Ops funds supports all infrastructure network IT systems supporting all A1 HR located at AFPC. This includes all tech refresh and upgrades to foundational hardware IT system and support for A1/AFPC/AFPOA FDCCI compliance efforts.</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4					P-1 Line Item Number / Title: 834010 / General Information Technology										Aggregated Items Title: Service Support to Other Core Missions - NORTHCOM				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
PE 0201110F SERVICE SUPPORT TO USNORTHCOM ACTIVITIES	A		-	-	0.306	-	-	0.476	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.476	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	0.306	-	-	0.476	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	0.306	-	-	0.476	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** US Northern Command Communications

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
INTEROPERABLE COMMUNICATION	A		-	-	0.079	-	-	0.088	-	-	0.581	-	-	0.581	-	-	-	-	-	0.581
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.088	-	-	0.581	-	-	0.581	-	-	-	-	-	0.581
DEPLOYABLE COMMUNICATIONS CAPABILITY SYSTEM LIFE CYCLE MANAGEMENT	A		-	-	2.883	-	-	2.909	-	-	2.336	-	-	2.876	-	-	-	-	-	2.876
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	2.909	-	-	2.336	-	-	2.876	-	-	-	-	-	2.876
EARLY WARNING RADAR (EWR) COMMUNICATIONS EQUIPMENT	A		-	-	2.083	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	5.045	-	-	2.997	-	-	2.917	-	-	3.457	-	-	-	-	-	3.457
Total			-	-	5.045	-	-	2.997	-	-	2.917	-	-	3.457	-	-	-	-	-	3.457

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** ISR Innovations

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
(1). EAGLE VISION DATA ACQUISITION SYSTEM REFRESH/ CAPITAL EQUIPMENT REPLACEMENT PE 0207277F	A		-	-	2.396	-	-	4.599	-	-	3.801	-	-	5.524	-	-	-	-	-	5.524
<i>Secondary Distribution</i>																				
AF			-	-	-	-	0.920	-	-	0.760	-	-	1.096	-	-	-	-	-	-	1.096
AFNG			-	-	-	-	3.679	-	-	3.041	-	-	4.428	-	-	-	-	-	-	4.428
AFR			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(3). EAGLE VISION PROGRAM MANAGEMENT ADMINISTRATION (PMA)	A		-	-	1.032	-	-	1.079	-	-	0.900	-	-	0.339	-	-	-	-	-	0.339
<i>Secondary Distribution</i>																				
AF			-	-	-	-	1.079	-	-	0.900	-	-	0.339	-	-	-	-	-	-	0.339
Subtotal: Uncategorized			-	-	3.428	-	-	5.678	-	-	4.701	-	-	5.863	-	-	-	-	-	5.863
Total			-	-	3.428	-	-	5.678	-	-	4.701	-	-	5.863	-	-	-	-	-	5.863

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Remarks:

Due to the lifecycle of commercial satellites, Eagle Vision must update the Next Generation 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.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** C2ISR Tactical Data Link

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
INSTALL KITS (Active) PE 0207488F																				
Install Kits (Active) PE 0207488F	A		-	-	-	-	-	-	-	-	0.106	12	1.274	-	-	-	0.106	12	1.274	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	12	1.274	-	-	-	-	12	1.274	
Subtotal: INSTALL KITS (Active) PE 0207488F			-	-	-	-	-	-	-	-	-	-	1.274	-	-	-	-	-	-	1.274
Other Government Support																				
Other Government Support	A		-	-	-	-	-	-	-	-	0.306	1	0.306	-	-	-	0.306	1	0.306	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	1	0.306	-	-	-	-	1	0.306	
Subtotal: Other Government Support			-	-	-	-	-	-	-	-	-	-	0.306	-	-	-	-	-	-	0.306
Total			-	-	-	-	-	-	-	-	-	-	1.580	-	-	-	-	-	-	1.580

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4					P-1 Line Item Number / Title: 834010 / General Information Technology										Aggregated Items Title: Combat Air Forces (CAF) Exercises and Readiness Training				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
COMBAT AIR FORCE EXERCISES AND READINESS TRAINING PE 0207603F	A		-	-	0.166	-	-	0.201	-	-	0.164	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	0.201		-	0.164		-	-		-	-		-	-
Subtotal: Uncategorized			-	-	0.166	-	-	0.201	-	-	0.164	-	-	-	-	-	-	-	-	-
Total			-	-	0.166	-	-	0.201	-	-	0.164	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** Wargaming and Simulation Centers

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
WARRIOR PREPARATION CENTER PE 0207605F	A		-	-	0.447	-	-	0.711	-	-	0.594	-	-	1.199	-	-	-	-	-	1.199
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.711	-	-	0.594	-	-	1.199	-	-	-	-	-	1.199
Subtotal: Uncategorized			-	-	0.447	-	-	0.711	-	-	0.594	-	-	1.199	-	-	-	-	-	1.199
Total			-	-	0.447	-	-	0.711	-	-	0.594	-	-	1.199	-	-	-	-	-	1.199

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.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834010 / General Information Technology	Aggregated Items Title: Distributed Training and Exercises
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
DISTRIBUTED TRAINING AND EXERCISES PE 0207697F	A		-	-	0.241	-	-	0.580	-	-	0.248	-	-	0.339	-	-	-	-	-	0.339
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.580	-	-	0.248	-	-	0.339	-	-	-	-	-	0.339
Subtotal: Uncategorized			-	-	0.241	-	-	0.580	-	-	0.248	-	-	0.339	-	-	-	-	-	0.339
Total			-	-	0.241	-	-	0.580	-	-	0.248	-	-	0.339	-	-	-	-	-	0.339

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4						P-1 Line Item Number / Title: 834010 / General Information Technology						Aggregated Items Title: AF OFFENSIVE CYBERSPACE OPERATIONS							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CYBER WORKFORCE TRAINING PE 0208087F	A		-	-	1.150	-	-	1.705	-	-	1.329	0.001	1,554	1,554	-	-	-	0.001	1,554	1,554
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.705	-	-	1.329	-	1,554	1,554	-	-	-	-	1,554	1,554
Subtotal: Uncategorized			-	-	1.150	-	-	1.705	-	-	1.329	-	-	1.554	-	-	-	-	-	1.554
Total			-	-	1.150	-	-	1.705	-	-	1.329	-	-	1.554	-	-	-	-	-	1.554

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** Air Force Communications (AIRCOM)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
AIRBORNE NETWORKING INTEGRATION (OCO) (PE 0303112F)	A		-	-	0.000	3.857	1	3.857	-	-	3.953	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	1	3.857	-	-	3.953	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	0.000	-	-	3.857	-	-	3.953	-	-	-	-	-	-	-	-	
Total			-	-	0.000	-	-	3.857	-	-	3.953	-	-	-	-	-	-	-	-	

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 consolidated airborne communications GIG entry point system. In addition, the funding will support Interim Contractor Support (ICS).

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4					P-1 Line Item Number / Title: 834010 / General Information Technology					Aggregated Items Title: Security and Investigative Activities										
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
OSI OPERATIONS PE 0305128F	A		-	-	0.990	-	-	1.593	-	-	1.337	-	-	1.800	-	-	-	-	-	1.800
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.593	-	-	1.337	-	-	1.800	-	-	-	-	-	1.800
Subtotal: Uncategorized			-	-	0.990	-	-	1.593	-	-	1.337	-	-	1.800	-	-	-	-	-	1.800
Total			-	-	0.990	-	-	1.593	-	-	1.337	-	-	1.800	-	-	-	-	-	1.800

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

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4							P-1 Line Item Number / Title: 834010 / General Information Technology								Aggregated Items Title: Space and Missile Test and Evaluation Center				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
RESEARCH AND DEVELOPMENT SPACE AND MISSILE OPERATIONS (RDSMO) (PE 0305173F)	A		-	-	1.038	-	-	1.683	-	-	1.435	-	-	1.977	-	-	-	-	-	1.977
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.683	-	-	1.435	-	-	1.977	-	-	-	-	-	1.977
Subtotal: Uncategorized			-	-	1.038	-	-	1.683	-	-	1.435	-	-	1.977	-	-	-	-	-	1.977
Total			-	-	1.038	-	-	1.683	-	-	1.435	-	-	1.977	-	-	-	-	-	1.977

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

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
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							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Distributed Communications Architecture																				
Distributed Communications Architecture	A		-	-	0.919	-	-	0.782	-	-	1.000	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.782	-	-	1.000	-	-	-	-	-	-	-	-	-
Subtotal: Distributed Communications Architecture			-	-	0.919	-	-	0.782	-	-	1.000	-	-	-	-	-	-	-	-	-
Space Analysis Center																				
Space Analysis Center PE 0305174F	A		-	-	0.000	-	-	0.507	-	-	0.221	-	-	1.481	-	-	-	-	-	1.481
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.507	-	-	0.221	-	-	1.481	-	-	-	-	-	1.481
Subtotal: Space Analysis Center			-	-	0.000	-	-	0.507	-	-	0.221	-	-	1.481	-	-	-	-	-	1.481
Total			-	-	0.919	-	-	1.289	-	-	1.221	-	-	1.481	-	-	-	-	-	1.481

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

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4							P-1 Line Item Number / Title: 834010 / General Information Technology							Aggregated Items Title: Communications and Information Technology					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Communications and Information Technology																				
Communications and Information Technology PE 0308611F	A		-	-	-	-	-	-	-	-	-	-	-	5.102	-	-	-	-	-	5.102
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	5.102	-	-	-	-	-	5.102
Subtotal: Communications and Information Technology			-	-	-	-	-	-	-	-	-	-	-	5.102	-	-	-	-	-	5.102
Total			-	-	-	-	-	-	-	-	-	-	-	5.102	-	-	-	-	-	5.102

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834010 / General Information Technology	Aggregated Items Title: Tactical Data Networks Enterprise
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
c. TACTICAL DATA NETWORKS ENTERPRISE (PE 0604281F)	A		-	-	0.153	-	-	-	-	-	0.002	-	-	1.842	-	-	-	-	-	1.842
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	0.002	-	-	1.842	-	-	-	-	-	1.842
Subtotal: Uncategorized			-	-	0.153	-	-	-	-	-	0.002	-	-	1.842	-	-	-	-	-	1.842
Total			-	-	0.153	-	-	-	-	-	0.002	-	-	1.842	-	-	-	-	-	1.842

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** Logistics Support Activities

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
GUNTER AIR FORCE BASE NETWORK SERVICES PE 0708012F	A		-	-	0.492	-	-	1.277	-	-	-	-	-	1.177	-	-	-	-	-	1.177
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.277	-	-	-	-	-	1.177	-	-	-	-	-	1.177
Subtotal: Uncategorized			-	-	0.492	-	-	1.277	-	-	-	-	-	1.177	-	-	-	-	-	1.177
Total			-	-	0.492	-	-	1.277	-	-	-	-	-	1.177	-	-	-	-	-	1.177

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4						P-1 Line Item Number / Title: 834010 / General Information Technology						Aggregated Items Title: Joint Logistics Program - Total Asset Visibility							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Active Radio Frequency Identification PE 0708074F	A		-	-	0.987	-	-	1.594	-	-	1.337	-	-	1.043	-	-	-	-	-	1.043
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.594	-	-	1.337	-	-	1.043	-	-	-	-	-	1.043
Passive Radio Frequency Identification	A		-	-	1.070	-	-	1.716	-	-	1.029	-	-	1.367	-	-	-	-	-	1.367
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.716	-	-	1.029	-	-	1.367	-	-	-	-	-	1.367
Item Unique Identification	A		-	-	1.421	-	-	2.279	-	-	1.913	-	-	1.042	-	-	-	-	-	1.042
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	2.279	-	-	1.913	-	-	1.042	-	-	-	-	-	1.042
Real Time Locating Systems	A		-	-	1.603	-	-	2.573	-	-	1.341	-	-	2.152	-	-	-	-	-	2.152
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	2.573	-	-	1.341	-	-	2.152	-	-	-	-	-	2.152
Subtotal: Uncategorized			-	-	5.081	-	-	8.162	-	-	5.620	-	-	5.604	-	-	-	-	-	5.604
Total			-	-	5.081	-	-	8.162	-	-	5.620	-	-	5.604	-	-	-	-	-	5.604

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** Recruiting Activities

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Air Force Recruiting and Information Support System - Legacy PE 0801711F	A		0.838	1	0.838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	0.838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	0.838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834010 / General Information Technology	Aggregated Items Title: Recruit Training Units
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BMT Surveillance System PE 0804711F	A		-	-	0.000	-	-	-	-	-	0.630	-	-	1.624	-	-	-	-	-	1.624
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	0.630	-	-	1.624	-	-	-	-	-	1.624
Subtotal: Uncategorized			-	-	0.000	-	-	-	-	-	0.630	-	-	1.624	-	-	-	-	-	1.624
Total			-	-	0.000	-	-	-	-	-	0.630	-	-	1.624	-	-	-	-	-	1.624

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** Service Academies

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
SERVICE ACADEMIES - USAFA PE 0804721F	A		-	-	2.214	-	-	2.702	-	-	3.227	-	-	3.374	-	-	-	-	-	3.374
<i>Secondary Distribution</i>																				
AF				-	-		-	2.702		-	3.227		-	3.374		-	-		-	3.374
Subtotal: Uncategorized			-	-	2.214	-	-	2.702	-	-	3.227	-	-	3.374	-	-	-	-	-	3.374
Total			-	-	2.214	-	-	2.702	-	-	3.227	-	-	3.374	-	-	-	-	-	3.374

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** General Skill Training

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
GEN SKILL TRAINING PE 0804731F	A		-	-	0.238	-	-	0.100	-	-	0.210	-	-	0.335	-	-	-	-	-	0.335
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.100	-	-	0.210	-	-	0.335	-	-	-	-	-	0.335
TECH TNG MANAGEMENT SYSTEM	A		-	-	0.105	-	-	0.189	-	-	0.245	-	-	0.360	-	-	-	-	-	0.360
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.189	-	-	0.245	-	-	0.360	-	-	-	-	-	0.360
Subtotal: Uncategorized			-	-	0.343	-	-	0.289	-	-	0.455	-	-	0.695	-	-	-	-	-	0.695
Total			-	-	0.343	-	-	0.289	-	-	0.455	-	-	0.695	-	-	-	-	-	0.695

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** Other Professional Education

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
OTHER PROFESSIONAL EDUCATION PE 0804752F	A		-	-	0.355	-	-	0.429	-	-	0.357	-	-	0.494	-	-	-	-	-	0.494
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.429	-	-	0.357	-	-	0.494	-	-	-	-	-	0.494
Subtotal: Uncategorized			-	-	0.355	-	-	0.429	-	-	0.357	-	-	0.494	-	-	-	-	-	0.494
Total			-	-	0.355	-	-	0.429	-	-	0.357	-	-	0.494	-	-	-	-	-	0.494

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834010 / General Information Technology **Aggregated Items Title:** Support of the Training Establishment

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
TRAINING SUPPORT PE 0804771F	A		-	-	0.722	-	-	0.749	-	-	0.730	-	-	1.016	-	-	-	-	-	1.016
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.749	-	-	0.730	-	-	1.016	-	-	-	-	-	1.016
Subtotal: Uncategorized			-	-	0.722	-	-	0.749	-	-	0.730	-	-	1.016	-	-	-	-	-	1.016
Total			-	-	0.722	-	-	0.749	-	-	0.730	-	-	1.016	-	-	-	-	-	1.016

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834010 / General Information Technology	Aggregated Items Title: Facilities Operation - Administrative
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
NexGen IT PE 0901279F	A		-	-	2.661	-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	2.661	-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	2.661	-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
PERSONNEL SERVICE DELIVERY PE 0901299F	A		-	-	0.315	-	-	0.379	-	-	0.282	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	0.379		-	0.282		-	-		-	-		-	
MILITARY PERSONNEL DATA SYSTEM (MILPDS)	A		-	-	0.770	-	-	0.907	-	-	0.283	-	-	0.536	-	-	-	-	0.536	
<i>Secondary Distribution</i>																				
AF				-	-		-	0.907		-	0.283		-	0.536		-	-		0.536	
REGIONALIZATION OF CIV PERS SUPPORT	A		-	-	1.391	-	-	1.664	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	1.664		-	-		-	-		-	-		-	
AIR FORCE PERSONNEL CENTER	A		-	-	1.833	-	-	2.202	-	-	0.221	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	2.202		-	0.221		-	-		-	-		-	
Air Force Personnel Operations Agency (AFPOA) Network Infrastructure	A		-	-	-	-	-	-	-	-	-	-	-	1.065	-	-	-	-	1.065	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	1.065		-	-		1.065	
Subtotal: Uncategorized			-	-	4.309	-	-	5.152	-	-	0.786	-	-	1.601	-	-	-	-	1.601	
Total			-	-	4.309	-	-	5.152	-	-	0.786	-	-	1.601	-	-	-	-	1.601	

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834040 / AF Global Command & Control Sys

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0303150F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	9.098	7.212	15.729	-	15.729	13.857	13.034	13.263	13.502	-	85.695
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	9.098	7.212	15.729	-	15.729	13.857	13.034	13.263	13.502	-	85.695
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	9.098	7.212	15.729	-	15.729	13.857	13.034	13.263	13.502	-	85.695

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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, but are not limited to, 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 command, 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 joint 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.

Funding for the exhibit contained in PE 0303150F: GLOBAL COMMAND AND CONTROL SYSTEM

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834040 / AF Global Command & Control Sys

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0303150F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	AF GLOL COMMAND and CONTROL SYS			- / 0.000	- / 9.098	- / 7.212	- / 15.729	- / -	- / 15.729
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 9.098	- / 7.212	- / 15.729	- / -	- / 15.729

*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:
 GLOBAL COMMAND AND CONTROL SYSTEM AIR FORCE (GCCS-AF): FY17 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-J version 6.0 hardware and software (government-off- the-shelf and commercial-off-the-shelf) at warfighter Combatant Command (COCOM) 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. GCCS-AF will continue to provide operational maintenance and support to the procured Strategic Server Enclave application and database servers, enclave protection components, and end-user equipment at multiple existing sites and support the deployment of updates to the Deliberate and Crisis Action Planning and Execution Segments (DCAPES) and Logistics Feasibility Analysis Capability (LOGFAC) applications. The GCCS architecture supports functional users on each base and specifically incorporates manpower and logistics functions into GCCS. GCCS-AF will continue to maintain and support a Windows baseline and server infrastructure to enable user access to the DCAPES and LOGFAC applications from any AF location. 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-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4						P-1 Line Item Number / Title: 834040 / AF Global Command & Control Sys						Aggregated Items Title: AF GLOL COMMAND and CONTROL SYS							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
GCCS-AF IMPLEMENTATION	A		-	-	0.000	-	-	0.787	-	-	1.139	-	-	9.552	-	-	-	-	-	9.552
PMA Contractor Services	A		-	-	0.000	-	-	4.856	-	-	4.355	-	-	4.003	-	-	-	-	-	4.003
GCCS-AF IMPLEMENTATION (INTEGRATION AND INSTALLATION)	A		-	-	0.000	-	-	3.455	-	-	1.718	-	-	2.174	-	-	-	-	-	2.174
Subtotal: Uncategorized			-	-	0.000	-	-	9.098	-	-	7.212	-	-	15.729	-	-	-	-	-	15.729
Total			-	-	0.000	-	-	9.098	-	-	7.212	-	-	15.729	-	-	-	-	-	15.729

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
834070 / Mobility Command and Control

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	9.097	11.462	13.062	9.814	-	9.814	9.987	10.165	10.344	10.530	-	84.461
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	9.097	11.462	13.062	9.814	-	9.814	9.987	10.165	10.344	10.530	-	84.461
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	9.097	11.462	13.062	9.814	-	9.814	9.987	10.165	10.344	10.530	-	84.461

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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.

Special Operations Forces PE 0404011F - P-40A
PE 0404011F Special Operations Forces:

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834070 / Mobility Command and Control
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	Item MDAP/MAIS Code(s): N/A	
<p>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.</p> <p>FY16 funding totals include \$2M for Overseas Contingency Operations.</p> <p>SPECIAL TACTICS / COMBAT CONTROL PE 0408011F - P-40A PE 0408011F AFSOC SPECIAL TACTICS/COMMAND & CONTROL:</p> <p>AFSOC TAC C2 program purchases enhanced communications systems and equipment essential for Special Tactics (ST) combat controllers, pararescue personnel, combat weather operators, and tactical air control parties to perform their mission. 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.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834070 / Mobility Command and Control

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	AMC Command and Control System			- / 9.097	- / 11.095	- / 11.062	- / 9.814	- / -	- / 9.814
P-40a	Special Operations Forces			- / -	- / -	- / 2.000	- / -	- / -	- / -
P-40a	SPECIAL TACTICS / COMBAT CONTROL			- / -	- / 0.367	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 9.097	- / 11.462	- / 13.062	- / 9.814	- / -	- / 9.814

*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:

AMC Command and Control System PE 0401840F - P-40A
PE 0401840F MOBILITY COMMAND AND CONTROL

MOBILITY AIR FORCE (MAF) COMMAND AND CONTROL (C2) INFRASTRUCTURE: FY17 funding continues procurement of wired and wireless base network infrastructure equipment to include cabling, routers, bridges, hubs, repeaters and switches as well as Land Mobile Radio (LMR) trunking systems 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): FY17 funding will be used to continue refurbishment/capital equipment replacement supporting Hard-side Expandable Lightweight Air Mobile Shelters (HELAMS).

Special Operations Forces PE 0404011F - P-40A
PE 0404011F Special Operations Forces:

No FY17 funding requested.

SPECIAL TACTICS / COMBAT CONTROL PE 0408011F - P-40A
PE 0408011F AIR FORCE SPECIAL OPERATIONS COMMAND SPECIAL TACTICS COMMAND AND CONTROL (AFSOC TAC C2)

After FY15, program funding moved to WSC 837100 Tactical Communications Electronics Equipment. No FY17 funding requested in WSC 834070 Mobility Command and Control.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834070 / Mobility Command and Control **Aggregated Items Title:** AMC Command and Control System

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
WING LOCAL AREA NETWORK (LAN) - Network Infrastructure	A		4.397	1	4.397	7.875	1	7.875	8.185	1	8.185	7.314	1	7.314	-	-	-	7.314	1	7.314
WING LOCAL AREA NETWORK (LAN) - Land Mobile Radio (LMR) Systems	A		4.400	1	4.400	2.870	1	2.870	2.177	1	2.177	1.800	1	1.800	-	-	-	1.800	1	1.800
DEPLOYABLE SATELLITE COMMUNICATIONS (DSATCOM)	A		0.300	1	0.300	0.350	1	0.350	0.350	2	0.700	0.350	2	0.700	-	-	-	0.350	2	0.700
Subtotal: Uncategorized			-	-	9.097	-	-	11.095	-	-	11.062	-	-	9.814	-	-	-	-	-	9.814
Total			-	-	9.097	-	-	11.095	-	-	11.062	-	-	9.814	-	-	-	-	-	9.814

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834070 / Mobility Command and Control **Aggregated Items Title:** Special Operations Forces

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Command and Control (C2) Air Rapid Response Kits (ARRKs)	A		-	-	-	-	-	-	0.667	3	2.000	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	2.000	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	2.000	-	-	-	-	-	-	-	-	

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4						P-1 Line Item Number / Title: 834070 / Mobility Command and Control									Aggregated Items Title: SPECIAL TACTICS / COMBAT CONTROL				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
AFSOC TAC C2 Equipment	A		-	-	-	0.367	1	0.367	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	0.367	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	0.367	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
 834130 / Air Force Physical Security System

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603287F, 0604287F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	42.323	39.925	103.269	99.460	7.500	106.960	69.052 ^(a)	87.014 ^(b)	83.120 ^(c)	57.345 ^(d)	-	589.008 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	42.323	39.925	103.269	99.460	7.500	106.960	69.052	87.014	83.120	57.345	-	589.008
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	42.323	39.925	103.269	99.460	7.500	106.960	69.052	87.014	83.120	57.345	-	589.008

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Air-Launched Cruise Missile (ALCM) PE 0101122F - 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.

Minuteman Squadrons PE 0101213F - 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.

Air Base Ground Defense PE 0207588F - P-40A
 Air Force Tactical Security Equipment provides 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.

Antiterrorism PE 0208047F - P-40A
 PE 0208047F: ANTI-TERRORISM
 Tactical and Expeditionary Security Systems: FY16 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.

General Skill Training PE 0804731F - P-40A

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834130 / Air Force Physical Security System

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0603287F, 0604287F
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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BASIC MILITARY TRAINING (BMT) SURVEILLANCE SECURITY SYSTEM: Due to allegations of misconduct by Military Training Instructors (MTIs) at BMT, AETC/CC directed an investigation to identify issues that place Airmen at risk in their training environment. This investigation was led by AF/CVS and revealed weaknesses in existing detection measures. SECAF/CSAF support findings and actions AETC is taking to prevent misconduct from reoccurring.

The purpose of the camera surveillance effort is to deter, monitor, and act upon the misconduct of Basic Trainees and/or Military Training Instructors. The goal is the surveillance of all common areas throughout all BMT facilities to include Airman Training Complexes (ATC) and Dining/Classroom Facilities (DCF). The surveillance system monitors personnel within all training facilities and provides a central storage solution expandable to maintain three years of video data.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	39.925	103.269	99.460	7.500	106.960	69.052	87.014	56.253	15.494
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	26.867	41.851
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	39.925	103.269	99.460	7.500	106.960	69.052	87.014	83.120	57.345

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
834130 / Air Force Physical Security System

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0603287F, 0604287F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Air-Launched Cruise Missile (ALCM)			- / -	- / 1.989	- / 1.908	- / 1.710	- / -	- / 1.710
P-40a	Minuteman Squadrons			- / -	- / 0.850	- / 0.814	- / 0.730	- / -	- / 0.730
P-40a	Air Base Ground Defense			- / -	- / 5.429	- / 15.598	- / 4.647	- / 7.500	- / 12.147
P-3a	1 / Base Physical Security Systems (Capability Improvement)			- / 35.727	- / 26.157	- / 75.849	- / 84.482	- / -	- / 84.482
P-40a	Antiterrorism			- / 6.596	- / 3.000	- / 9.100	- / 7.891	- / -	- / 7.891
P-40a	General Skill Training			- / -	- / 2.500	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 42.323	- / 39.925	- / 103.269	- / 99.460	- / 7.500	- / 106.960

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Air-Launched Cruise Missile (ALCM)			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Minuteman Squadrons			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Air Base Ground Defense			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / Base Physical Security Systems (Capability Improvement)			- / 53.768	- / 79.674	- / 75.650	- / 49.740	- / -	- / 481.047
P-40a	Antiterrorism			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	General Skill Training			- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 69.052	- / 87.014	- / 83.120	- / 57.345	- / -	- / 589.008

*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:
Air-Launched Cruise Missile (ALCM) PE 0101122F - P-40A
PE 0101122F - AIR LAUNCHED CRUISE MISSILE (ALCM) SECURITY SYSTEMS: FY17 funding procures commodity security equipment including intrusion detection sensors, alarm annunciators, and surveillance systems required for nuclear warhead storage locations.

Minuteman Squadrons PE 0101213F - P-40A
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.

Air Base Ground Defense PE 0207588F - P-40A
Air Force Tactical Security Equipment: FY17 funding will provide fixed-site Intrusion Detection Systems (IDS) and Biometric Identification Systems (BIS) for Protection Levels (PL) 1/2/3/4, as well as automated tactical/expeditionary equipment.

Antiterrorism PE 0208047F - P-40A
PE 0208047F: ANTI-TERRORISM

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834130 / Air Force Physical Security System
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0603287F, 0604287F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>Tactical and Expeditionary Security Systems: FY17 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.</p> <p>General Skill Training PE 0804731F - P-40A No FY17 funding requested.</p> <p>Efforts with funding starting in FY 2018 through FY 2021 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:</p> <ul style="list-style-type: none">(a) FY 2018 Cost Delta: 15.284 million(b) FY 2019 Cost Delta: 7.340 million(c) FY 2020 Cost Delta: 7.470 million(d) FY 2021 Cost Delta: 7.605 million(e) FY Total Cost Delta: 107.961 million		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
AIR LAUNCHED CRUISE MISSILE (ALCM) SECURITY SYSTEMS	A		-	-	-	-	-	1.989	-	-	1.908	-	-	1.710	-	-	-	-	-	1.710
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.989	-	-	1.908	-	-	1.710	-	-	-	-	-	1.710
Subtotal: Uncategorized			-	-	-	-	-	1.989	-	-	1.908	-	-	1.710	-	-	-	-	-	1.710
Total			-	-	-	-	-	1.989	-	-	1.908	-	-	1.710	-	-	-	-	-	1.710
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
AIR LAUNCHED CRUISE MISSILE (ALCM) SECURITY SYSTEMS	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	1.740	-	-	1.771	-	-	1.802	-	-	1.835	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834130 / Air Force Physical Security System **Aggregated Items Title:** Minuteman Squadrons

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Minuteman Security Equipment	A		-	-	-	-	-	0.850	-	-	0.814	-	-	0.730	-	-	-	-	-	0.730
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.850	-	-	0.814	-	-	0.730	-	-	-	-	-	0.730
Subtotal: Uncategorized			-	-	-	-	-	0.850	-	-	0.814	-	-	0.730	-	-	-	-	-	0.730
Total			-	-	-	-	-	0.850	-	-	0.814	-	-	0.730	-	-	-	-	-	0.730
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Minuteman Security Equipment	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	0.744	-	-	0.756	-	-	0.770	-	-	0.784	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Air Force Tactical Security Equipment	A		-	-	-	-	-	5.429	-	-	15.598	-	-	4.647	-	-	7.500	-	-	12.147
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	5.429	-	-	15.598	-	-	4.647	-	-	7.500	-	-	12.147
Subtotal: Uncategorized			-	-	-	-	-	5.429	-	-	15.598	-	-	4.647	-	-	7.500	-	-	12.147
Total			-	-	-	-	-	5.429	-	-	15.598	-	-	4.647	-	-	7.500	-	-	12.147
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Air Force Tactical Security Equipment	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	4.730	-	-	4.813	-	-	4.898	-	-	4.986	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834130 / Air Force Physical Security System	Modification Number / Title: 1 / Base Physical Security Systems
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	35.727	26.157	75.849	84.482	-	84.482	53.768	79.674	75.650	49.740	-	481.047
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	35.727	26.157	75.849	84.482	-	84.482	53.768	79.674	75.650	49.740	-	481.047
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	35.727	26.157	75.849	84.482	-	84.482	53.768	79.674	75.650	49.740	-	481.047

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

INTEGRATED BASE DEFENSE SECURITY SYSTEM (IBDSS): 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).

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.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	26.157	75.849	84.482	-	84.482	53.768	79.674	48.783	7.889
AFNG									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	-	-	-	-	-	-	-	26.867	41.851
Total:									
Secondary Distribution									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	26.157	75.849	84.482	-	84.482	53.768	79.674	75.650	49.740

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4					P-1 Line Item Number / Title: 834130 / Air Force Physical Security System					Modification Number / Title: 1 / Base Physical Security Systems			
Models of Systems Affected: Bases				Modification Type: Capability Improvement				Related RDT&E PEs: 0603287F, 0604287F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: Physical Security Systems</i>													
A Kits													
Recurring													
Physical Security Systems:INSTALL KITS Group A (Active)	4 / 23.347	4 / 19.724	9 / 69.147	6 / 77.413	- / -	6 / 77.413	6 / 46.205	10 / 70.519	6 / 39.711	- / -	- / -	45 / 346.066	
Physical Security Systems:INSTALL KITS Group A (Guard)	1 / 5.837	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 26.867	6 / 41.851	- / -	11 / 74.555	
<i>Subtotal: Recurring</i>	- / 29.184	- / 19.724	- / 69.147	- / 77.413	- / -	- / 77.413	- / 46.205	- / 70.519	- / 66.578	- / 41.851	- / -	- / 420.621	
<i>Subtotal: Physical Security Systems</i>	- / 29.184	- / 19.724	- / 69.147	- / 77.413	- / -	- / 77.413	- / 46.205	- / 70.519	- / 66.578	- / 41.851	- / -	- / 420.621	
<i>Subtotal: Procurement, All Modification Items</i>	- / 29.184	- / 19.724	- / 69.147	- / 77.413	- / -	- / 77.413	- / 46.205	- / 70.519	- / 66.578	- / 41.851	- / -	- / 420.621	
Support (All Modification Items)													
A&AS	0 / 1.570	- / 1.986	- / 1.691	- / 1.734	- / -	- / 1.734	- / 1.777	- / 1.821	- / 1.867	- / 1.914	- / -	- / 14.360	
PMA - Contractor Services	0 / 3.541	- / 3.786	- / 2.970	- / 3.044	- / -	- / 3.044	- / 3.120	- / 3.198	- / 3.278	- / 3.360	- / -	- / 26.297	
PMA - Other Gov't Costs	0 / 0.260	- / 0.138	- / 0.392	- / 0.392	- / -	- / 0.392	- / 0.392	- / 0.392	- / 0.392	- / 0.392	- / -	- / 12.750	
ICS-Labor	0 / 1.172	- / 0.523	- / 1.649	- / 1.899	- / -	- / 1.899	- / 2.274	- / 3.744	- / 3.535	- / 2.223	- / -	- / 17.019	
<i>Subtotal: Support</i>	0 / 6.543	- / 6.433	- / 6.702	- / 7.069	- / -	- / 7.069	- / 7.563	- / 9.155	- / 9.072	- / 7.889	- / -	- / 60.426	
Installation													
<i>Modification Item 1 of 1: Physical Security Systems</i>	5 / 0.000	4 / -	9 / -	6 / -	- / -	6 / -	6 / -	10 / -	10 / -	6 / -	- / -	56 / -	
<i>Subtotal: Installation</i>	5 / 0.000	4 / -	9 / -	6 / -	- / -	6 / -	6 / -	10 / -	10 / -	6 / -	- / -	56 / -	
Total													
Total Cost (Procurement + Support + Installation)	35.727	26.157	75.849	84.482	-	84.482	53.768	79.674	75.650	49.740	-	481.047	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834130 / Air Force Physical Security System	Modification Number / Title: 1 / Base Physical Security Systems

Modification Item 1 of 1: Physical Security Systems

Manufacturer Information

Manufacturer Name: Commercial Off The Shelf	Manufacturer Location: Multiple
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 0

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Nov 2014	Nov 2015	Nov 2016	Nov 2017	Dec 2018	Dec 2019	Nov 2020
Delivery Dates	Nov 2014	Nov 2015	Nov 2016	Nov 2017	Dec 2018	Dec 2019	Nov 2020

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	5 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.000
FY 2015	- / -	4 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / -
FY 2016	- / -	- / -	9 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / -
FY 2017	- / -	- / -	- / -	6 / -	- / -	6 / -	- / -	- / -	- / -	- / -	- / -	6 / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	6 / -	- / -	- / -	- / -	- / -	6 / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / -	- / -	- / -	- / -	10 / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / -	- / -	- / -	10 / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / -	- / -	6 / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.000	4 / -	9 / -	6 / -	- / -	6 / -	6 / -	10 / -	10 / -	6 / -	- / -	56 / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4																										
In	5	-	1	2	1	-	1	7	1	-	2	2	2	2	2	-	2	2	2	3	3	2	2	3	3	-	2	2	2	-	56
Out	5	-	1	2	1	-	1	7	1	-	2	2	2	2	2	-	2	2	2	3	3	2	2	3	3	-	2	2	2	-	56

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834130 / Air Force Physical Security System **Aggregated Items Title:** Antiterrorism

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Tactical and Expeditionary Security Sysytems	A		-	-	6.596	-	-	3.000	-	-	9.100	-	-	7.891	-	-	-	-	-	7.891
<i>Secondary Distribution</i>																				
AF				-	-		-	3.000		-	9.100		-	7.891		-	-		-	7.891
Subtotal: Uncategorized			-	-	6.596	-	-	3.000	-	-	9.100	-	-	7.891	-	-	-	-	-	7.891
Total			-	-	6.596	-	-	3.000	-	-	9.100	-	-	7.891	-	-	-	-	-	7.891
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Tactical and Expeditionary Security Sysytems	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	8.070		-	-		-	-		-	-		-	-		-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4						P-1 Line Item Number / Title: 834130 / Air Force Physical Security System						Aggregated Items Title: General Skill Training							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
General Skills Training Equipment																				
General Skills Training Equipment	A		-	-	-	-	-	2.500	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	2.500		-	-		-	-		-	-		-	-
Subtotal: General Skills Training Equipment			-	-	-	-	-	2.500	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	2.500	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
 834190 / Combat Training Ranges

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0207429F **Other Related Program Elements:** 0207429F, 0604735F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	59.634	33.606	34.850	-	34.850	130.677 ^(a)	150.192 ^(b)	192.678 ^(c)	152.259 ^(d)	-	753.896 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	59.634	33.606	34.850	-	34.850	130.677	150.192	192.678	152.259	-	753.896
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	59.634	33.606	34.850	-	34.850	130.677	150.192	192.678	152.259	-	753.896

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 SA-2, SA-3, SA-6, SA-13 and AAA threat signals 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. The JTE system uses either a mobile command-and-control unit (MC2U) or a Fixed Command and Control Unit (FC2U). 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.

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 Live Mission Operations Center (LMOC) to support improved mission debriefs and future Live, Virtual, Constructive (LVC) aircrew training, and standardization of all training range communications systems to support LVC training missions. In FY17, this program focuses on procurement of the LMOC, in addition to 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 to studies, analysis, and integration efforts for the LMOC.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834190 / Combat Training Ranges

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0207429F **Other Related Program Elements:** 0207429F, 0604735F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

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.

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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	14	3	1	-	1	-	-	-	-
	Total Obligation Authority	58.984	31.172	34.850	-	34.850	40.594	11.542	1.968	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.650	2.434	-	-	-	12.844	-	-	-
Total: Secondary Distribution	Quantity	14	3	1	-	1	-	-	-	-
	Total Obligation Authority	59.634	33.606	34.850	-	34.850	53.438	11.542	1.968	-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 834190 / Combat Training Ranges
Equip / BSA 4: Spcl Comm-Electronics Projects

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0207429F **Other Related Program Elements:** 0207429F, 0604735F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	JTE	P-5a	B	- / -	7 / 44.730	3 / 22.955	1 / 3.615	- / -	1 / 3.615
P-5	Range Equipment		A	- / -	- / 9.850	- / -	- / 1.371	- / -	- / 1.371
P-5	Range Communications		A	- / -	- / -	- / -	- / 25.964	- / -	- / 25.964
P-40a	Combat Training Range Equipment			- / 0.000	- / 2.000	- / 10.651	- / 3.900	- / -	- / 3.900
P-40a	Aerial Targets			- / -	- / 3.054	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 59.634	- / 33.606	- / 34.850	- / -	- / 34.850

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	JTE	P-5a	B	- / -	- / -	- / -	- / -	- / -	- / -
P-5	Range Equipment		A	- / -	- / -	- / -	- / -	- / -	- / -
P-5	Range Communications		A	- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Combat Training Range Equipment			- / 8.484	- / 10.326	- / -	- / -	- / -	- / 35.361
P-40a	Aerial Targets			- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 130.677	- / 150.192	- / 192.678	- / 152.259	- / -	- / 753.896

*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, RIMCOM P-5, is a new start.

JOINT THREAT EMITTER (JTE): FY17 funding requested is to procure additional JTE fixed command and control unit and the associated equipment.

RANGE COMMUNICATIONS (RIMCOM): FY17 funding is requested for range communications equipment to provide an integrated air defense system (IADS) capability on Air Force ranges. FY17 expenditures will focus on studies, analyses to support integration efforts for the Live Mission Operations Center (LMOC) as well as procurement of equipment for all combat training ranges. RIMCOM is an FY17 new start.

RANGE EQUIPMENT: FY17 funding requested to replace equipment that is no longer logistically supportable.

LEGACY SYSTEMS: FY17 funding requested to modify UMTEs to replace the obsolete electronic attack receivers with the common electronic attack receiver (CEAR).

PE0305116F AERIAL TARGETS

TARGET CONTROL SYSTEMS (TCS): No FY17 funding requested.

Efforts with funding starting in FY 2018 through FY 2021 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:

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834190 / Combat Training Ranges
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0207429F	Other Related Program Elements: 0207429F, 0604735F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>(a) FY 2018 Cost Delta: 122.193 million (b) FY 2019 Cost Delta: 139.866 million (c) FY 2020 Cost Delta: 192.678 million (d) FY 2021 Cost Delta: 152.259 million (e) FY Total Cost Delta: 718.535 million</p>		

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834190 / Combat Training Ranges **Item Number / Title [DODIC]:** - / JTE

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	7	3	1	-	1	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	44.730	22.955	3.615	-	3.615	-	-	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	44.730	22.955	3.615	-	3.615	-	-	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	44.730	22.955	3.615	-	3.615	-	-	-	-	-	-

(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)	-	6.390	7.652	3.615	-	3.615	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - JTE Cost																		
Recurring Cost																		
Joint Threat Emitter (JTE) Units ^(f)	-	-	-	6.737	6	40.422	9.747	2	19.494	-	-	-	-	-	-	-	-	-
JTE Command Control Unit ^(f)	-	-	-	1.460	1	1.460	1.306	1	1.306	1.490	1	1.490	-	-	-	1.490	1	1.490
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	<i>41.882</i>	-	-	<i>20.800</i>	-	-	<i>1.490</i>	-	-	-	-	-	<i>1.490</i>
<i>Subtotal: Hardware - JTE Cost</i>	-	-	-	-	-	<i>41.882</i>	-	-	<i>20.800</i>	-	-	<i>1.490</i>	-	-	-	-	-	<i>1.490</i>
Support - JTE Cost																		
A&AS (PMA)	-	-	-	-	-	0.747	-	-	0.750	-	-	0.750	-	-	-	-	-	0.750
A&AS (DMS)	-	-	-	-	-	1.100	-	-	1.100	-	-	1.065	-	-	-	-	-	1.065
PMA	-	-	-	-	-	0.100	-	-	0.100	-	-	0.100	-	-	-	-	-	0.100
Support	-	-	-	-	-	0.901	-	-	0.205	-	-	0.210	-	-	-	-	-	0.210
<i>Subtotal: Support - JTE Cost</i>	-	-	-	-	-	<i>2.848</i>	-	-	<i>2.155</i>	-	-	<i>2.125</i>	-	-	-	-	-	<i>2.125</i>
Gross/Weapon System Cost	-	-	-	6.390	7	44.730	7.652	3	22.955	3.615	1	3.615	-	-	-	3.615	1	3.615

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - JTE Cost																		

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834190 / Combat Training Ranges **Item Number / Title [DODIC]:** - / JTE

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

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Recurring Cost																		
Joint Threat Emitter (JTE) Units ^(t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
JTE Command Control Unit ^(t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - JTE Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - JTE Cost																		
A&AS (PMA)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A&AS (DMS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PMA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - JTE Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	7	3	1	-	1	-	-	-	-
	Total Obligation Authority	44.730	22.955	3.615	-	3.615	32.110	1.216	1.968	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	12.844	-	-	-
Total: Secondary Distribution	Quantity	7	3	1	-	1	-	-	-	-
	Total Obligation Authority	44.730	22.955	3.615	-	3.615	-	-	-	-

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834190 / Combat Training Ranges	Item Number / Title [DODIC]: - / JTE
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Joint Threat Emitter (JTE) Units		2015	Northrop Grumman Amherst Systems / Buffalo, NY	C / FFP	AFLCMC Hill AFB	Oct 2016	Feb 2018	6	6.737	N	Sep 2016	
Joint Threat Emitter (JTE) Units		2016	Northrop Grumman Amherst Systems / Buffalo, NY	C / FFP	AFLCMC Hill AFB	Oct 2017	Feb 2019	2	9.747	N	Sep 2016	
JTE Command Control Unit		2015	Northrop Grumman Amherst Systems / Buffalo, NY	C / FFP	AFLCMC Hill AFB	Oct 2016	Feb 2018	1	1.460	N	Sep 2016	
JTE Command Control Unit		2016	Northrop Grumman Amherst Systems / Buffalo, NY	C / FFP	AFLCMC Hill AFB	Feb 2017	Sep 2018	1	1.306	N	Sep 2016	
JTE Command Control Unit		2017	Northrop Grumman Amherst Systems / Buffalo, NY	C / FFP	AFLCMC Hill AFB	Oct 2017	Feb 2019	1	1.490	N		

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834190 / Combat Training Ranges	Item Number / Title [DODIC]: - / Range Equipment

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	9.850	-	1.371	-	1.371
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	9.850	-	1.371	-	1.371
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	9.850	-	1.371	-	1.371

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Range Equipment Cost																		
Recurring Cost																		
Range Equipment	-	-	-	-	-	9.850	-	-	-	-	-	1.371	-	-	-	-	-	1.371
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	9.850	-	-	-	-	-	1.371	-	-	-	-	-	1.371
<i>Subtotal: Hardware - Range Equipment Cost</i>	-	-	-	-	-	9.850	-	-	-	-	-	1.371	-	-	-	-	-	1.371
Gross/Weapon System Cost	-	-	-	-	-	9.850	-	-	-	-	-	1.371	-	-	-	-	-	1.371

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	Quantity	-	-	-	-	-
	Total Obligation Authority	9.850	-	1.371	-	1.371
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	9.850	-	1.371	-	1.371

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	-	25.964	-	25.964
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	-	25.964	-	25.964
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	-	25.964	-	25.964

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - RIMCOM Cost																		
Recurring Cost																		
Radios	-	-	-	-	-	-	-	-	-	0.049	132	6.473	-	-	-	0.049	132	6.473
Datalink	-	-	-	-	-	-	-	-	-	0.125	2	0.250	-	-	-	0.125	2	0.250
IADS Networks	-	-	-	-	-	-	-	-	-	1.000	4	4.000	-	-	-	1.000	4	4.000
Fiber Optics	-	-	-	-	-	-	-	-	-	0.234	7	1.637	-	-	-	0.234	7	1.637
Datalink/EW Jammers	-	-	-	-	-	-	-	-	-	1.400	5	7.000	-	-	-	1.400	5	7.000
Test Calibration Equipment	-	-	-	-	-	-	-	-	-	0.776	8	6.208	-	-	-	0.776	8	6.208
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	25.568	-	-	-	-	-	25.568
<i>Subtotal: Hardware - RIMCOM Cost</i>	-	-	-	-	-	-	-	-	-	-	-	25.568	-	-	-	-	-	25.568
Support - RIMCOM Cost																		
A&AS	-	-	-	-	-	-	-	-	-	-	-	0.300	-	-	-	-	-	0.300
PMA	-	-	-	-	-	-	-	-	-	-	-	0.096	-	-	-	-	-	0.096
<i>Subtotal: Support - RIMCOM Cost</i>	-	-	-	-	-	-	-	-	-	-	-	0.396	-	-	-	-	-	0.396
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	25.964	-	-	-	-	-	25.964

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF Quantity	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Secondary Distribution					
Total Obligation Authority	-	-	25.964	-	25.964
Total:					
Secondary Distribution					
Quantity	-	-	-	-	-
Total Obligation Authority	-	-	25.964	-	25.964

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834190 / Combat Training Ranges **Aggregated Modification Items Title:** Combat Training Range Equipment

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
CTR01 / Combat Training Ranges Joint Threat Emitter			-	-	-	-	-	2.000	-	-	3.651	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	1.350		-	1.217		-	-		-	-		-	-
AFNG				-	-		-	0.650		-	2.434		-	-		-	-		-	-
CTR02 / Combat Training Ranges UMTE			-	-	-	-	-	-	-	-	7.000	-	-	3.900	-	-	-	-	-	3.900
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	7.000		-	3.900		-	-		-	3.900
CTR03 / Mini-Mute Mod (CEAR)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
Total			-	-	0.000	-	-	2.000	-	-	10.651	-	-	3.900	-	-	-	-	-	3.900

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
CTR01 / Combat Training Ranges Joint Threat Emitter			-	-	3.184	-	-	3.326	-	-	-	-	-	-	-	-	-	-	-	12.161
<i>Secondary Distribution</i>																				
AF				-	3.184		-	3.326		-	-		-	-		-	-		-	-
AFNG				-	-		-	-		-	-		-	-		-	-		-	-
CTR02 / Combat Training Ranges UMTE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.900
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
CTR03 / Mini-Mute Mod (CEAR)			-	-	5.300	-	-	7.000	-	-	-	-	-	-	-	-	-	-	-	12.300
<i>Secondary Distribution</i>																				
AF				-	5.300		-	7.000		-	-		-	-		-	-		-	-
Total			-	-	8.484	-	-	10.326	-	-	-	-	-	-	-	-	-	-	-	35.361

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

Modification Information:

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834190 / Combat Training Ranges	Aggregated Modification Items Title: Combat Training Range Equipment
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Item Number / Title	Models of Systems Affected	Modification Type
CTR01 / Combat Training Ranges Joint Threat Emitter	Joint Threat Emitter	Service Life Extension
CTR02 / Combat Training Ranges UMTE	Combat Training Range	Capability Improvement
CTR03 / Mini-Mute Mod (CEAR)	Combat Training Range	Capability Improvement

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834190 / Combat Training Ranges	Aggregated Items Title: Aerial Targets
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Data Link System-replacement	A		-	-	-	0.436	7	3.054	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-		7	3.054		-	-		-	-		-	-		-	
Subtotal: Uncategorized			-	-	-	-	-	3.054	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	3.054	-	-	-	-	-	-	-	-	-	-	-	

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
 834210 / Minimum Essential Emergency Communications Network

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0303131F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	1.457	5.232	198.925	-	198.925	130.188	40.486	62.584	76.227	-	515.099
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	1.457	5.232	198.925	-	198.925	130.188	40.486	62.584	76.227	-	515.099
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	1.457	5.232	198.925	-	198.925	130.188	40.486	62.584	76.227	-	515.099

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 pre-production activities. The majority of pre-production support activities will be conducted in FY16 and FY17 in advance of the Milestone C decision in 2QFY17.

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. Procurement funding begins in FY20 to perform pre-production activities in support of Milestone C decision in 1QFY21.

Global ASNT Inc 3 is planned to deliver a Very Low Frequency (VLF)/Low Frequency (LF) receive capability.

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. The intent of CVR Inc 2 is to develop and produce a common VLF/LF receiver with an interoperable waveform for future platform integration to include airborne and ground based nodes and to improve system performance and reduce supportability costs through commonality. Procurement funding begins in FY20 to perform pre-production activities in support of a Milestone C decision in 1QFY21.

Funding for this exhibit is contained in PE 0303131F.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834210 / Minimum Essential Emergency Communications Network

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0303131F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Minimum Essential Emergency Communications Network	P-5a	B	- / -	- / 1.457	- / 5.232	- / 198.925	- / -	- / 198.925
P-40	Total Gross/Weapon System Cost			- / -	- / 1.457	- / 5.232	- / 198.925	- / -	- / 198.925

*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:
 Global ASNT Increment 1 FY2017 funds will support production activities including preparation and planning for depot standup, engineering start-up, schedule preparation and planning, production configuration control, production roadmap activities, and procurement of sixty (60) production kits.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834210 / Minimum Essential Emergency Communications Network	Item Number / Title [DODIC]: - / Minimum Essential Emergency Communications Network

ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	1.457	5.232	198.925	-	198.925
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	1.457	5.232	198.925	-	198.925
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	1.457	5.232	198.925	-	198.925

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Minimum Essential Emergency Comm N Cost																		
Recurring Cost																		
Global ASNT Terminals ^(†)	-	-	-	-	-	-	-	-	-	3.276	60	196.558	-	-	-	3.276	60	196.558
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	196.558	-	-	-	-	-	196.558
Non Recurring Cost																		
Global ASNT Terminals Logistics/Sustainment Economic Analysis	-	-	-	-	-	0.723	-	-	0.200	-	-	-	-	-	-	-	-	-
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	0.723	-	-	0.200	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - Minimum Essential Emergency Comm N Cost</i>	-	-	-	-	-	0.723	-	-	0.200	-	-	196.558	-	-	-	-	-	196.558
Support - Minimum Essential Emergency Communication Network (MEECN) Cost																		
Direct Mission Suppt (DMS)	-	-	-	-	-	0.711	-	-	4.512	-	-	1.628	-	-	-	-	-	1.628
Program Management Administrative (PMA)	-	-	-	-	-	0.023	-	-	0.520	-	-	0.739	-	-	-	-	-	0.739
<i>Subtotal: Support - Minimum Essential Emergency Communication Network (MEECN) Cost</i>	-	-	-	-	-	0.734	-	-	5.032	-	-	2.367	-	-	-	-	-	2.367

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834210 / Minimum Essential Emergency Communications Network	Item Number / Title [DODIC]: - / Minimum Essential Emergency Communications Network
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	-	-	-	1.457	-	-	5.232	-	-	198.925	-	-	-	-	-	198.925

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4			P-1 Line Item Number / Title: 834210 / Minimum Essential Emergency Communications Network					Item Number / Title [DODIC]: - / Minimum Essential Emergency Communications Network				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revision Available	RFP Issue Date
Global ASNT Terminals		2017	Raytheon / Largo, FL	C / FFP	AFLCMC Hanscom AFB	Mar 2017	Apr 2018	60	3.276	N	Feb 2017	

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
 834240 / Wide Area Surveillance (WAS)

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0604445F **Other Related Program Elements:** 0604445F

Line Item MDAP/MAIS Code: 519 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	6.943	-	6.943	-	-	-	-	-	6.943
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	-	6.943	-	6.943	-	-	-	-	-	6.943
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	6.943	-	6.943	-	-	-	-	-	6.943

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Wide Area Surveillance (WAS) consists of sensor programs. WAS will provide warfighters the ability to detect airborne threats.

Some aspects of the WAS program are classified and will be provided on a need-to-know basis.

Funding for this exhibit contained in PE 0604445F, Wide Area Surveillance.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834240 / Wide Area Surveillance (WAS)

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0604445F **Other Related Program Elements:** 0604445F

Line Item MDAP/MAIS Code: 519 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Wide Area Surveillance		B	- / 0.000	- / -	- / -	- / 6.943	- / -	- / 6.943
P-40	Total Gross/Weapon System Cost			- / 0.000	- / -	- / -	- / 6.943	- / -	- / 6.943

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Wide Area Surveillance		B	- / -	- / -	- / -	- / -	- / -	- / 6.943
P-40	Total Gross/Weapon System Cost			- / -	- / 6.943				

*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 0604445F P-5, is a new start.

- FY2017 funds will field operational sensors in accordance with North American Aerospace Defense Command (NORAD) and U.S. Northern Command (NORTHCOM) Homeland Defense Design
 - FY2017 Program management administration (PMA) funds will provide management, engineering and technical support for the program office

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834240 / Wide Area Surveillance (WAS)	Item Number / Title [DODIC]: - / Wide Area Surveillance
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ID Code (A=Service Ready, B=Not Service Ready) : B **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	6.943	-	6.943	-	-	-	-	-	6.943
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	-	6.943	-	6.943	-	-	-	-	-	6.943
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	6.943	-	6.943	-	-	-	-	-	6.943

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total			
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Hardware - Wide Area Surveillance Cost																			
Recurring Cost																			
WAS recurring cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.443
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.443
Non Recurring Cost																			
PMA contractor services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.500
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.500
<i>Subtotal: Hardware - Wide Area Surveillance Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.943
Gross/Weapon System Cost	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.943

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost			
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Hardware - Wide Area Surveillance Cost																			
Recurring Cost																			
WAS recurring cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.443
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.443
Non Recurring Cost																			

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834240 / Wide Area Surveillance (WAS)	Item Number / Title [DODIC]: - / Wide Area Surveillance
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ID Code (A=Service Ready, B=Not Service Ready) : B **MDAP/MAIS Code:**

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
PMA contractor services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.500
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.500
<i>Subtotal: Hardware - Wide Area Surveillance Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.943
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.943

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834320 / C3 Countermeasures

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	12.408	7.453	19.580	0.620	20.200	19.521	18.349	18.366	19.879	-	116.176
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	12.408	7.453	19.580	0.620	20.200	19.521	18.349	18.366	19.879	-	116.176
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	12.408	7.453	19.580	0.620	20.200	19.521	18.349	18.366	19.879	-	116.176

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The FY17 funding request was reduced by \$.307M to account for the availability of prior year execution balances.

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.

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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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834320 / C3 Countermeasures
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	Item MDAP/MAIS Code(s): N/A	
<p>Defensive Cyber Operations provides focused, agile cyber defense forces to provide mission assurance by maneuvering within high-value, mission OEF networks and systems to assure unobstructed successful operations.</p> <p>FY2015 funding totals include \$0.90M appropriated for Overseas Contingency Operations.</p> <p>Intel Data Applications PE 0208288F - P-40A Includes several subprograms: CONSTANT WEB, SENSOR SHADOW, Technical Electronic Intelligence (ELINT) Analytics/Tool Development and Operational Reconnaissance (Ops Recce) Capability, Analytics/Tool Development.</p> <p>*CONSTANT WEB is a database developed by the US Air Force's Intelligence Surveillance and Reconnaissance Agency (AFISRA) that contains information on both hostile and friendly C3 networks, units, and installations. It also provides limited criticality assessments of C3 elements.</p> <p>*SENSOR SHADOW is a Command and Control Warfare (C2W) and information tool designed to support strategic and operational planners. Funding provides upgrades of critical computers, processing systems, and infrastructure to support holistic Information Operations (IO) and nodal analysis in support of unique aspects of targeting that enables the shift from conventional to IW/C2W targeting.</p> <p>*Technical Electronic Intelligence (TechELINT) Analytics/Tool Development provides for the acquisition of new analytical software tools, storage and communications capability to allow the judicious processing, exploitation and dissemination of intercepted ELINT from US and allied systems.</p> <p>*Operational Reconnaissance (Ops Recce) Capability, Analytics/Tool Development provides for increased battlespace awareness through the use of sensors/platforms to achieve effects beyond what those sensors/platforms were originally designed.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834320 / C3 Countermeasures

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	National Technical Nuclear Forensics			- / -	- / -	- / -	- / 5.852	- / -	- / 5.852
P-40a	Electronic Warfare Integrated Reprogramming (EWIR)			- / -	- / 1.301	- / 0.902	- / 1.581	- / -	- / 1.581
P-40a	AF Offensive Cyberspace Operations			- / -	- / 9.894	- / 6.332	- / 11.774	- / -	- / 11.774
P-40a	AF Defensive Cyberspace Operations			- / -	- / 0.900	- / -	- / -	- / 0.620	- / 0.620
P-40a	Intel Data Applications			- / -	- / 0.313	- / 0.219	- / 0.373	- / -	- / 0.373
P-40	Total Gross/Weapon System Cost			- / -	- / 12.408	- / 7.453	- / 19.580	- / 0.620	- / 20.200

*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, PE 0207573F P-40A Item Nuclear Forensics - Prompt Diagnostics, 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

FY17 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.

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.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834320 / C3 Countermeasures **Aggregated Items Title:** National Technical Nuclear Forensics

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
National Technical Nuclear Forensics																				
Nuclear Forensics - Prompt Diagnostics	A		-	-	-	-	-	-	-	-	-	-	-	5.852	-	-	-	-	-	5.852
Subtotal: National Technical Nuclear Forensics			-	-	-	-	-	-	-	-	-	-	-	5.852	-	-	-	-	-	5.852
Total			-	-	-	-	-	-	-	-	-	-	-	5.852	-	-	-	-	-	5.852

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 to support nuclear event attribution. Funding also includes procurement of technical data and any required follow on system support.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4							P-1 Line Item Number / Title: 834320 / C3 Countermeasures							Aggregated Items Title: Electronic Warfare Integrated Reprogramming (EWIR)					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Client PCs	A		-	-	-	0.225	1	0.225	0.010	1	0.010	0.200	1	0.200	-	-	-	0.200	1	0.200
Computer Server	A		-	-	-	-	-	-	0.220	1	0.220	1.121	1	1.121	-	-	-	1.121	1	1.121
Data Storage System	A		-	-	-	0.876	1	0.876	0.472	1	0.472	0.150	1	0.150	-	-	-	0.150	1	0.150
Network Infrastructure	A		-	-	-	0.100	1	0.100	0.070	1	0.070	0.060	1	0.060	-	-	-	0.060	1	0.060
Tape Backup System	A		-	-	-	0.100	1	0.100	0.130	1	0.130	0.050	1	0.050	-	-	-	0.050	1	0.050
Subtotal: Uncategorized			-	-	-	-	-	1.301	-	-	0.902	-	-	1.581	-	-	-	-	-	1.581
Total			-	-	-	-	-	1.301	-	-	0.902	-	-	1.581	-	-	-	-	-	1.581

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
OFFENSIVE CYBER OPERATIONS Support	A		-	-	-	-	-	9.894	-	-	6.332	-	-	11.774	-	-	-	-	-	11.774
Subtotal: Uncategorized			-	-	-	-	-	9.894	-	-	6.332	-	-	11.774	-	-	-	-	-	11.774
Total			-	-	-	-	-	9.894	-	-	6.332	-	-	11.774	-	-	-	-	-	11.774

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834320 / C3 Countermeasures	Aggregated Items Title: AF Defensive Cyberspace Operations
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total				
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)		
Uncategorized																						
Defensive Cyber Operations Support	A		-	-	-	-	-	0.900	-	-	-	-	-	-	-	-	-	-	0.620	-	-	0.620
Subtotal: Uncategorized			-	-	-	-	-	0.900	-	-	-	-	-	-	-	-	-	-	0.620	-	-	0.620
Total			-	-	-	-	-	0.900	-	-	-	-	-	-	-	-	-	-	0.620	-	-	0.620

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834320 / C3 Countermeasures **Aggregated Items Title:** Intel Data Applications

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
PE 0208288F INTEL DATA APPLICATIONS	A		-	-	-	-	-	0.313	-	-	0.219	-	-	0.373	-	-	-	-	-	0.373
Subtotal: Uncategorized			-	-	-	-	-	0.313	-	-	0.219	-	-	0.373	-	-	-	-	-	0.373
Total			-	-	-	-	-	0.313	-	-	0.219	-	-	0.373	-	-	-	-	-	0.373

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
 834430 / GCSS-AF Fos

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0708012F, 0708610F

Line Item MDAP/MAIS Code: 221 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	9.398	3.670	15.015	1.743	-	1.743	7.193	7.246	11.341	13.222	-	68.828
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	9.398	3.670	15.015	1.743	-	1.743	7.193	7.246	11.341	13.222	-	68.828
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	9.398	3.670	15.015	1.743	-	1.743	7.193	7.246	11.341	13.222	-	68.828

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 0303141F GLOBAL COMBAT SUPPORT SYSTEM

GLOBAL COMBAT SUPPORT SYSTEM-AIR FORCE (GCSS-AF): This program element encompasses GCSS-AF's Integration Framework and its presentation layer for operational users. This infrastructure and provided Air Force enterprise common services are a critical basis for the target common computing environment (CCE) effort which Air Force Guidance Memorandum has directed for all new and modernizing IT applications. This effort is the Air Force evolution to DoD Joint Information Environment (JIE) leveraging Core Data Centers (CDCs) and DISA-brokered cloud capabilities in compliance with the Air Force Information Technology (AF IT) baselines. This framework is a set of baseline-driven platform and infrastructure services in both physical and virtual hosting environments. It is comprised of development tools, an initial set of enterprise services, and governance processes critical to JIE management. As the customer interfaces on GCSS-AF, the presentation layer provides the worldwide standard security and single sign-on for accessing a variety of functional systems. The framework uses additional security features of Public Key Infrastructure (PKI) and AF Directory Services, negating duplication of security features in each of the functional systems being modernized within the GCSS-AF Family of Systems (FoS). This effort procures application, security, web, and proxy servers, software and associated licenses, and engineering support.

Funding for this exhibit contained in PE 0303141F.

PE 0708012F LOGISTICS SUPPORT ACTIVITY

CARGO MOVEMENT OPERATIONS SYSTEM (CMOS): CMOS supports base-level and theater distribution management. More than 235 Air Force, Marine Corps, Navy, Army, NSA, and DCMA activities employ CMOS through its web-based and deployable configurations. CMOS continues to provide effective traffic management support to the warfighter for both peacetime and contingency operations. CMOS prepares and manages all movement documentation, electronically interfaces with shippers, commercial carriers, and receiving activities, and provides bar code/radio frequency identification (RFID) capability.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834430 / GCSS-AF Fos
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0708012F, 0708610F
Line Item MDAP/MAIS Code: 221	Item MDAP/MAIS Code(s): N/A	
<p>It provides in-transit visibility to DOD and commercial carriers, aids planning and managing force deployment, and supports the deployed Air and Space Expeditionary Force (AEF) warfighter through deployable and standard CMOS architectures.</p> <p>Funding for this exhibit contained in PE 0708012F.</p> <p>PE 0708610F LOGISTICS INFORMATION TECHNOLOGY (LOGIT)</p> <p>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.</p> <p>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).</p> <p>Funding for this exhibit contained in PE 0708610F.</p> <p>PE 0901538 FINANCIAL MGMT INFO SYS DEVELOPMENT</p> <p>DEFENSE ENTERPRISE ACCOUNTING AND MANAGEMENT SYSTEM (DEAMS) Increment 1: To enhance transparency, DEAMS Other Procurement Air Force (OPAF) funding in Weapon System Code (WSC) 834430, Global Combat Support System - Air Force Family of Systems (GCSS-AF FOS) will end in FY 2014. Starting in FY 2015, DEAMS OPAF funding requests will be shown in WSC 834470, DEAMS.</p> <p>DEAMS Inc 1 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 AF and United States Transportation Command (USTRANSCOM) Enterprise Resource Planning (ERP) Program that will replace 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).</p> <p>In 2014, DEAMS Inc 2 activities were incorporated into DEAMS Inc 1 to expedite deployment to operational locations and users.</p> <p>DEAMS Inc 1 capability is currently deployed to 14 locations and being used by ~3,000 users. In FY 2015-2017, DEAMS Inc 1 capability will continue to be deployed to additional locations and users.</p> <p>Funding for this exhibit contained in PE 0901538F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 834430 / GCSS-AF Fos
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:** 0708012F, 0708610F

Line Item MDAP/MAIS Code: 221 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Global Combat Support System			- / 3.038	- / -	- / -	- / -	- / -	- / -
P-40a	Logistics Support Activities			- / -	- / 0.696	- / 0.796	- / 0.819	- / -	- / 0.819
P-40a	Logistics Information Technology (LOGIT)			- / -	- / 2.974	- / 14.219	- / 0.924	- / -	- / 0.924
P-40a	Financial Management Information Systems Development			- / 6.360	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 9.398	- / 3.670	- / 15.015	- / 1.743	- / -	- / 1.743

*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 0303141F GLOBAL COMBAT SUPPORT SYSTEM

No FY16 funding requested.

PE 0708012F LOGISTICS SUPPORT ACTIVITY

CARGO MOVEMENT OPERATIONS SYSTEM (CMOS): CMOS supports base-level and theater distribution management. More than 235 Air Force, Marine Corps, Navy, Army, NSA, and DCMA activities employ CMOS through its web-based and deployable configurations. CMOS continues to provide effective traffic management support to the warfighter for both peacetime and contingency operations. CMOS prepares and manages all movement documentation, electronically interfaces with shippers, commercial carriers, and receiving activities, and provides bar code/radio frequency identification (RFID) capability. It provides in-transit visibility to DOD and commercial carriers, aids planning and managing force deployment, and supports the deployed Air and Space Expeditionary Force (AEF) warfighter through deployable and standard CMOS architectures.

PE 0708012F LOGISTICS SUPPORT ACTIVITY

CARGO MOVEMENT OPERATIONS SYSTEM: FY16 procurement dollars procure different types/amounts of hardware in support of installation and unit mission requirements for Joint personnel. These funds replace hardware and updates software and licensing to support the sustainment posture for contingency operations, and buy various mixes of hardware, software, and licensing for 60 new sites. Hardware replacement mitigates increased capability demands on older platforms and supports deployable CMOS hardware and associated Automatic Identification Technology (AIT).

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.

PE 0901538F FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT

No FY 16 funding requested.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834430 / GCSS-AF Fos **Aggregated Items Title:** Global Combat Support System

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
GLOBAL COMBAT SUPPORT SYSTEM	A		3.038	1	3.038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	3.038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	3.038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834430 / GCSS-AF Fos **Aggregated Items Title:** Logistics Support Activities

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CARGO MOVEMENT OPERATIONS SYSTEM - Hand Held Terminals (HHTS) with peripheral devices	A		-	-	-	0.002	347	0.696	0.002	398	0.796	0.003	273	0.819	-	-	-	0.003	273	0.819
Subtotal: Uncategorized			-	-	-	-	-	0.696	-	-	0.796	-	-	0.819	-	-	-	-	-	0.819
Total			-	-	-	-	-	0.696	-	-	0.796	-	-	0.819	-	-	-	-	-	0.819

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834430 / GCSS-AF Fos	Aggregated Items Title: Logistics Information Technology (LOGIT)
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Logistics Information Technology (LOGIT)- Servers and related multi-year software licenses	A		-	-	-	0.496	6	2.974	0.508	28	14.219	0.462	2	0.924	-	-	-	0.462	2	0.924
Subtotal: Uncategorized			-	-	-	-	-	2.974	-	-	14.219	-	-	0.924	-	-	-	-	-	0.924
Total			-	-	-	-	-	2.974	-	-	14.219	-	-	0.924	-	-	-	-	-	0.924

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4						P-1 Line Item Number / Title: 834430 / GCSS-AF Fos						Aggregated Items Title: Financial Management Information Systems Development							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
FINANCIAL MANAGEMENT INFORMATION SYSTEM	A		-	-	6.360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	6.360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	6.360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 834470 / Defense Enterprise Accounting and Mgmt System

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0901538F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	4.298	4.755	-	-	-	-	-	-	-	-	9.053
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	4.298	4.755	-	-	-	-	-	-	-	-	9.053
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	4.298	4.755	-	-	-	-	-	-	-	-	9.053

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Defense Enterprise Accounting and Management System Increment 1 (DEAMS Inc 1).

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 bring the Air Force in compliance with the Financial Improvement and Audit Readiness (FIAR) requirement in the 2010 NDAA.

DEAMS Inc 1 is planned as an eight-release program:

- 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), Air Force Global Strike Command (AFGSC), Air Education and Training Command (AETC)
- 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 (USAF), Pacific Air Forces (PACAF), and DFAS Japan
- Release 5 - U. S. Air Forces in Europe (USAFE), and DFAS Europe
- Release 6 - Air Force Space Command (AFSPC), Air Force Materiel Command (AFMC), and DFAS Columbus
- Release 7 - Conversion programs (Legacy elimination)
- Release 8 - Surface Deployment and Distribution Command (SDDC)

DEAMS Inc 1 capability will continue to be deployed in FY2016-2017 as approved by the Milestone Decision Authority.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 834470 / Defense Enterprise Accounting and Mgmt System
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0901538F	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>FY 2015 and FY 2016 funds used to procure Oracle software licenses and other miscellaneous items using multiple contracts and various vendors via annual task order contracts.</p> <p>FY2015 Congressional approved reprogramming of \$11.000M from OPAF to O&M.</p> <p>FY2016 Congressional Directed Reduction of \$4.500M for "early to need."</p> <p>No FY 2017 funding is requested.</p> <p>Procurement funding for DEAMS is in PE 0901538F, Financial Information Management Systems Development (FMISD).</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 834470 / Defense Enterprise Accounting and Mgmt System

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0901538F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Financial Management Information Systems Development	P-5a	B	- / 0.000	- / 4.298	- / 4.755	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 4.298	- / 4.755	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Financial Management Information Systems Development	P-5a	B	- / -	- / -	- / -	- / -	- / -	- / 9.053
P-40	Total Gross/Weapon System Cost			- / -	- / 9.053				

*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.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 834470 / Defense Enterprise Accounting and Mgmt System	Item Number / Title [DODIC]: - / Financial Management Information Systems Development

ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.000	4.298	4.755	-	-	-	-	-	-	-	-	9.053
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	4.298	4.755	-	-	-	-	-	-	-	-	9.053
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	4.298	4.755	-	-	-	-	-	-	-	-	9.053

(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 Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Software - DEAMS Cost																		
Recurring Cost																		
Software ⁽¹⁾	-	-	0.000	870.04	4,940	4.298	870.08	5,465	4.755	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	0.000	-	-	4.298	-	-	4.755	-	-	-	-	-	-	-	-	-
Subtotal: Software - DEAMS Cost	-	-	0.000	-	-	4.298	-	-	4.755	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	0.000	-	-	4.298	-	-	4.755	-	-	-	-	-	-	-	-	-

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Software - DEAMS Cost																		
Recurring Cost																		
Software ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	870.06	10,405	9.053
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.053
Subtotal: Software - DEAMS Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.053
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.053

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 834470 / Defense Enterprise Accounting and Mgmt System	Item Number / Title [DODIC]: - / Financial Management Information Systems Development
ID Code (A=Service Ready, B=Not Service Ready) : B		MDAP/MAIS Code:
^(†) indicates the presence of a P-5a		

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force								Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6			P-1 Line Item Number / Title: 834470 / Defense Enterprise Accounting and Mgmt System					Item Number / Title [DODIC]: - / Financial Management Information Systems Development				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
Software		2015	DLT Solutions / Herndon, VA	C / FFP	AFLCMC/HI - Business & Enterprise Systems	Jun 2015	Jul 2015	4,940	870.04	N		Feb 2015
Software		2016	DLT Solutions / Herndon, VA	C / FFP	AFLCMC/HI - Business & Enterprise Systems	Jun 2016	Jul 2016	5,465	870.08	N		Feb 2016

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:** 834520 / Theater Battle Mgt C2 System

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0207410F **Other Related Program Elements:** 0207410F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	9.493	7.473	9.659	-	9.659	9.555 ^(a)	9.189 ^(b)	9.353 ^(c)	9.523 ^(d)	-	64.245 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	9.493	7.473	9.659	-	9.659	9.555	9.189	9.353	9.523	-	64.245
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	9.493	7.473	9.659	-	9.659	9.555	9.189	9.353	9.523	-	64.245

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Theater Battle Management Core Systems (TBMCS) is 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 entities ranging from the force level (Air Operations Centers [AOC]) to the unit level (wings/squadrons) for operations and intelligence functions. TBMCS is a United States Air Force 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 - Force Level (TBMCS FL) 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 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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
834520 / Theater Battle Mgt C2 System

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0207410F **Other Related Program Elements:** 0207410F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	TBMC2			- / -	- / 4.673	- / 3.139	- / 5.114	- / -	- / 5.114
P-40a	TBMC2 Mods			- / 0.000	- / 4.820	- / 4.334	- / 4.545	- / -	- / 4.545
P-40	Total Gross/Weapon System Cost			- / -	- / 9.493	- / 7.473	- / 9.659	- / -	- / 9.659

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	TBMC2			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	TBMC2 Mods			- / 4.626	- / 4.707	- / 4.792	- / 4.879	- / -	- / 32.703
P-40	Total Gross/Weapon System Cost			- / 9.555	- / 9.189	- / 9.353	- / 9.523	- / -	- / 64.245

*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. **TBMC2 - FORCE LEVEL (TBMC2 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. FY17 funding will continue fielding TBMC2 FL to include security patches, vendor update patches, operating system upgrades, and DoD mandated policy updates. TBMC2 FL will also continue capitol equipment replacements to the systems to maintain security posture and field updates to 40 locations (28 AD/7 ANG/5 AFR).
 - a. **TBMC2 FL PROGRAM MANAGEMENT ADMINISTRATION (PMA):** FY17 funding includes provisions for government contract oversight, technical expertise, and program office support associated with the fielding of TBMC2 FL.
 - b. **TBMC2 FL TRAINING & FIELDING:** FY17 funding will continue to support Type 1 training & fielding. As contractors field the TBMC2 FL upgrades, they will provide specialized training at each location.
 - c-e. **TBMC2 FL:** FY17 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 TBMC2 FL systems. Enhanced unit-level operations capabilities will be provided through the UC2 project. FY17 funding will continue to support fielding Capital Equipment Replacement (CER) cycle for UC2 at 40 active duty locations.
 - a. **UC2 HARDWARE AND COMMERCIAL-OFF-THE-SHELF (COTS) SOFTWARE:** FY17 funds will continue to replace clients, servers, miscellaneous hardware, and associated software licenses for UC2 sites.
 - b. **UC2 PMA:** FY17 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 web-based 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. FY17 funding will continue to support PRC2 operations.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834520 / Theater Battle Mgt C2 System
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0207410F	Other Related Program Elements: 0207410F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>a. PRC2 HARDWARE AND COTS SOFTWARE: FY17 funding will continue procure various hardware pieces and associated software licenses for fielding to various sites.</p> <p>b. PRC2 PMA: FY17 funding will provide for government contract oversight, technical expertise, and program office support associated with the fielding of PRC2.</p> <p>Efforts with funding starting in FY 2018 through FY 2021 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:</p> <ul style="list-style-type: none">(a) FY 2018 Cost Delta: 4.929 million(b) FY 2019 Cost Delta: 4.482 million(c) FY 2020 Cost Delta: 4.561 million(d) FY 2021 Cost Delta: 4.644 million(e) FY Total Cost Delta: 31.542 million		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834520 / Theater Battle Mgt C2 System	Aggregated Items Title: TBMC2
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
TBMCS FL	A		-	-	-	-	-	4.673	-	-	3.139	-	-	5.114	-	-	-	-	-	5.114
Subtotal: Uncategorized			-	-	-	-	-	4.673	-	-	3.139	-	-	5.114	-	-	-	-	-	5.114
Total			-	-	-	-	-	4.673	-	-	3.139	-	-	5.114	-	-	-	-	-	5.114

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

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4 **P-1 Line Item Number / Title:** 834520 / Theater Battle Mgt C2 System **Aggregated Modification Items Title:** TBMC2 Mods

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
PRC2 / PRC2			-	-	-	-	-	0.995	-	-	1.255	-	-	1.252	-	-	-	-	-	1.252
UC2 / UC2			-	-	-	-	-	3.825	-	-	3.079	-	-	3.293	-	-	-	-	-	3.293
Total			-	-	0.000	-	-	4.820	-	-	4.334	-	-	4.545	-	-	-	-	-	4.545

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
PRC2 / PRC2			-	-	1.274	-	-	1.297	-	-	1.320	-	-	1.344	-	-	-	-	-	8.737
UC2 / UC2			-	-	3.352	-	-	3.410	-	-	3.472	-	-	3.535	-	-	-	-	-	23.966
Total			-	-	4.626	-	-	4.707	-	-	4.792	-	-	4.879	-	-	-	-	-	32.703

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
PRC2 / PRC2	PRC2	Capability Improvement
UC2 / UC2	UC2	Capability Improvement

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
834530 / Air & Space Operations Ctr-WPN SYS

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	25.701	9.993	15.474	-	15.474	41.335	37.608	38.340	39.003	-	207.454
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	25.701	9.993	15.474	-	15.474	41.335	37.608	38.340	39.003	-	207.454
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	25.701	9.993	15.474	-	15.474	41.335	37.608	38.340	39.003	-	207.454

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 funding provides system hardware, software, technical documents, capital equipment replacement, core radio and initial training to standardize and sustain the AOC WS. The fielding and capital equipment replacement consist of AOCs and their associated support sites (e.g., help desk, Formal Training Unit, experimental sites, and Air Reserve Component sites).

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.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	24.164	9.993	14.574	-	14.574	40.435	36.708	37.440	38.103
AFNG									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	0.854	-	0.600	-	0.600	0.600	0.600	0.600	0.600
AFR									
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	0.683	-	0.300	-	0.300	0.300	0.300	0.300	0.300
Total:									
Quantity	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 834530 / Air & Space Operations Ctr-WPN SYS
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Secondary Distribution	Total Obligation Authority	25.701	9.993	15.474	-	15.474	41.335	37.608	38.340	39.003

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
834530 / Air & Space Operations Ctr-WPN SYS

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Air & Space Operations Ctr-WPN SYS		A	- / -	- / 25.701	- / 9.993	- / 15.474	- / -	- / 15.474
P-40	Total Gross/Weapon System Cost			- / -	- / 25.701	- / 9.993	- / 15.474	- / -	- / 15.474

*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: The AOC WS contains over 40 Command and Control (C2) systems/applications that are continually being updated. The AOC WS 10.1 integrates these changes as well as provides periodic Capital Equipment Replacement 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 third party program deliveries. Major subsystems have enhanced their security profile and this fielding will serve as a reaccreditation of the overall AOC Weapon System baseline. This sustainment profile provides an excellent transition point for the AOC WS 10.2 modernization baseline. Primary efforts in fielding include Capital Equipment Replacement and Recurring Events (RE).

There are three distinct categories of AOCs: Geographic, Functional (planned name change to Global), and assorted AOC Support Functions (Help Desk, Formal Training Unit, 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 Functional (planned name change to Global) Command. Thus, as no two AOCs are alike when a Capital Equipment Replacement or RE 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.

Funding may be used to alleviate Diminishing Manufacturing Sources (DMS) issues.

a. CAPITAL EQUIPMENT REPLACEMENT: FY17 funds will be used to keep the AOCs and their associated support sites up-to-date by replacing end-of-life/end of support components with solutions that will bridge between 10.1 and 10.2 (e.g., core radio package). FY17 Capital Equipment Replacement will address numerous commercial end-of-life and DMS components that must be resolved. Differences in site specific setup (due to variations between Geographic CCMD or Functional (planned name change to Global) Command needs) will drive differences in site specific requirements. Therefore, there is no meaningful way to measure quantities as the Capital Equipment Replacement of each site is significantly different.

b. RECURRING EVENTS (RE): REs are regularly scheduled third party application updates to keep the AOC interoperable, supportable, and compliant (e.g., certification and accreditation). They are normally comprised of hardware/software changes/updates and security patches. Each RE is based on warfighter-validated needs that require updates to the AOC WS 10.1. FY17 will fund REs, periodic maintenance upgrades, emergency fixes, and other activities (e.g., security fixes, testing activities) potentially affecting some or all AOCs (Geographical/Support/Functional (planned name change to Global)) and their associated support sites. Additionally, differences in site specific setup (due to variations between Geographic CCMD or Functional (planned name change to Global) Command needs) will drive differences in site specific requirements. Therefore, there is no meaningful way to measure quantities as the fielding of an RE to each site is significantly different.

c. FIELDING SYSTEM PROGRAM OFFICE (SPO) SUPPORT: FY17 funds will be used to provide government oversight, technical expertise, and program office support associated with the fielding of AOC. Differences in site specific setup (due to variations between mission specific needs and differences in site type i.e., Geographic vs. Functional (planned name change to Global) vs. Associated Support Site vs. Reserve Components) will drive differences in site specific requirements (e.g., time required, hardware required and software required).

d. TEST SUPPORT (46 Test Squadron [46TS]): FY17 funds will be used to provide government oversight and technical expertise associated with the testing of AOC.

2. PROGRAM MANAGEMENT ADMINISTRATION (PMA): The breakdown of this activity includes the following:

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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: 834530 / Air & Space Operations Ctr-WPN SYS
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	Item MDAP/MAIS Code(s): N/A	

- a. PROGRAM SUPPORT: FY17 funding includes provisions for government contract oversight, technical expertise, and program management office support associated with standardization of the AOC WS 10.1 baseline.
 - b. TECHNICAL DOCUMENTATION: No FY17 funding requested.
- Items requested in FY17 are identified on the following P-5 and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834530 / Air & Space Operations Ctr-WPN SYS	Item Number / Title [DODIC]: - / Air & Space Operations Ctr-WPN SYS

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	25.701	9.993	15.474	-	15.474
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	25.701	9.993	15.474	-	15.474
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	25.701	9.993	15.474	-	15.474

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)

Hardware - Hardware End Item Cost

Recurring Cost

1.a.1. CAPITAL EQUIPMENT REPLACEMENT: GEOGRAPHIC/FUNCTIONAL (planned name change to Global) AOC - AD	-	-	-	-	-	3.783	-	-	0.450	-	-	-	-	-	-	-	-	-
1.a.2. CAPITAL EQUIPMENT REPLACEMENT: AOC SUPPORT SITES - AD	-	-	-	-	-	1.669	-	-	-	-	-	3.457	-	-	-	-	-	3.457
1.a.3. CAPITAL EQUIPMENT REPLACEMENT: AOC EXPERIMENTAL SITES - AD	-	-	-	-	-	2.082	-	-	1.575	-	-	2.055	-	-	-	-	-	2.055
1.a.4. CAPITAL EQUIPMENT REPLACEMENT - RESERVE	-	-	-	-	-	0.683	-	-	-	-	-	0.300	-	-	-	-	-	0.300
1.a.5. CAPITAL EQUIPMENT REPLACEMENT - GUARD	-	-	-	-	-	0.854	-	-	-	-	-	0.600	-	-	-	-	-	0.600

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4		P-1 Line Item Number / Title: 834530 / Air & Space Operations Ctr-WPN SYS
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
1.b.1. RECURRING EVENTS: AOC SITES - AD	-	-	-	-	-	0.930	-	-	0.285	-	-	3.306	-	-	-	-	-	3.306
1.b.2. RECURRING EVENTS: SUPPORT SITES - AD	-	-	-	-	-	0.877	-	-	-	-	-	-	-	-	-	-	-	-
1.c. FIELDING SPO SUPPORT	-	-	-	-	-	10.505	-	-	4.989	-	-	3.836	-	-	-	-	-	3.836
1.d. TEST SUPPORT (46TS)	-	-	-	-	-	1.395	-	-	0.646	-	-	0.830	-	-	-	-	-	0.830
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	22.778	-	-	7.945	-	-	14.384	-	-	-	-	-	14.384
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	22.778	-	-	7.945	-	-	14.384	-	-	-	-	-	14.384
<i>Support - Support End Item Cost</i>																		
2.a. PROGRAM MANAGEMENT ADMINISTRATION: PROGRAM SUPPORT	-	-	-	-	-	2.605	-	-	2.048	-	-	1.090	-	-	-	-	-	1.090
2.b. PROGRAM MANAGEMENT ADMINISTRATION: TECHNICAL DOCUMENTATION	-	-	-	-	-	0.318	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	2.923	-	-	2.048	-	-	1.090	-	-	-	-	-	1.090
Gross/Weapon System Cost	-	-	-	-	-	25.701	-	-	9.993	-	-	15.474	-	-	-	-	-	15.474

Remarks:

- Due to different levels of complexity, differences in equipment to be updated and length of required time necessary for modification total cost will fluctuate between fiscal years.
- Differences in site specific setup (due to variations between mission specific needs and differences in site type i.e., Geographic vs. Functional (planned name change to Global) vs. Associated Support Site vs. Reserve Components) 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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	Quantity	-	-	-	-	-
	Total Obligation Authority	24.164	9.993	14.574	-	14.574
AFNG	Quantity	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 4	P-1 Line Item Number / Title: 834530 / Air & Space Operations Ctr-WPN SYS	Item Number / Title [DODIC]: - / Air & Space Operations Ctr-WPN SYS
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ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Secondary Distribution						
	Total Obligation Authority	0.854	-	0.600	-	0.600
AFR	Quantity	-	-	-	-	-
	Total Obligation Authority	0.683	-	0.300	-	0.300
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	25.701	9.993	15.474	-	15.474

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 3: Electronics Programs

P-1 Line Item Number / Title:
834560 / Air Operations Center (AOC) 10.2

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	14.846	30.623	-	30.623	11.844	-	-	-	36.500	93.813
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	14.846	30.623	-	30.623	11.844	-	-	-	36.500	93.813
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	14.846	30.623	-	30.623	11.844	-	-	-	36.500	93.813

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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 weapon system 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 AOC 10.2 is currently in the Engineering and Manufacturing Development (EMD) phase. The program completed contractor System Acceptance Test (SAT) in July 2015 and Developmental Test 1 (DT1) in September 2015; Developmental Test 2 (DT2) is projected in May 2016. Milestone C (MS-C) is projected for June 2016. Initial Operational Test & Evaluation (IOT&E) Phase 1 is projected to begin August 2016 and continue through November 2016. IOT&E Phase 2 is projected to begin December 2016 and continue through February 2017. Full Deployment Decision (FDD) is projected for June 2017. These efforts are using Research, Development, Test & Evaluation (RDT&E) funds under PE 0605458F.

Funding for this exhibit is contained in PE 0207410F.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 3: Electronics Programs **P-1 Line Item Number / Title:** 834560 / Air Operations Center (AOC) 10.2

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Air Operations Center (AOC) 10.2	P-5a, P-21	B	- / 0.000	- / -	- / 14.846	- / 30.623	- / -	- / 30.623
P-40	Total Gross/Weapon System Cost			- / 0.000	- / -	- / 14.846	- / 30.623	- / -	- / 30.623

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Air Operations Center (AOC) 10.2	P-5a, P-21	B	- / 11.844	- / -	- / -	- / -	- / 36.500	- / 93.813
P-40	Total Gross/Weapon System Cost			- / 11.844	- / -	- / -	- / -	- / 36.500	- / 93.813

*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. PACKAGE FIELDING: The breakdown of this activity includes the following:
 - a. INITIAL FIELDING: FY17 funds will be used to support the procurement of hardware, software, warranties, support, and installation of the 10.2 baseline system to Geographic AOCs.
 - b. SITE INSTALLATION TESTING: FY17 funds will be used to prepare and conduct site testing, primarily conducted by the 46th Test Squadron (46TS). 46TS conducts functional and cyber testing of fielded systems.
 - c. FIELDING SUPPORT: FY17 funds will be used to provide technical expertise required to field AOC.
 - d. TRAINING: In conjunction with the 10.2 fielding, FY17 funds will be used for initial training on the 10.2 weapon system, which will be provided to site operators, network administrators, and system administrators.
2. SUPPORT: The breakdown of this activity includes the following:
 - a. PROGRAM MANAGEMENT ADMINISTRATION (PMA): FY17 funding includes provisions for government contract oversight, technical expertise, and program management office support associated with 10.2 baseline standardization of the AOC WS.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **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 **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	14.846	30.623	-	30.623	11.844	-	-	-	36.500	93.813
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	14.846	30.623	-	30.623	11.844	-	-	-	36.500	93.813
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	14.846	30.623	-	30.623	11.844	-	-	-	36.500	93.813

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Package Fielding - PackageFielding End Item Cost																		
Recurring Cost																		
Initial Fielding ^(†)	-	-	0.000	-	-	-	10.936	1	10.936	11.222	2	22.443	-	-	-	11.222	2	22.443
Site Installation Testing	-	-	0.000	-	-	-	-	-	0.180	-	-	0.360	-	-	-	-	-	0.360
<i>Subtotal: Recurring Cost</i>	-	-	<i>0.000</i>	-	-	-	-	-	<i>11.116</i>	-	-	<i>22.803</i>	-	-	-	-	-	<i>22.803</i>
<i>Subtotal: Package Fielding - PackageFielding End Item Cost</i>	-	-	<i>0.000</i>	-	-	-	-	-	<i>11.116</i>	-	-	<i>22.803</i>	-	-	-	-	-	<i>22.803</i>
Support - Support End Item Cost																		
Program Management Administration (PMA)	-	-	-	-	-	-	-	-	2.120	-	-	4.600	-	-	-	-	-	4.600
Fielding Technical Support	-	-	-	-	-	-	-	-	0.340	-	-	0.680	-	-	-	-	-	0.680
Type I Training	-	-	-	-	-	-	-	-	1.270	-	-	2.540	-	-	-	-	-	2.540
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	-	-	-	<i>3.730</i>	-	-	<i>7.820</i>	-	-	-	-	-	<i>7.820</i>
Gross/Weapon System Cost	-	-	0.000	-	-	-	-	-	14.846	-	-	30.623	-	-	-	-	-	30.623

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	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 **MDAP/MAIS Code:**

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Package Fielding - PackageFielding End Item Cost																		
Recurring Cost																		
Initial Fielding ^(†)	2.937	3	8.810	-	-	-	-	-	-	-	-	-	-	-	28.680	11.812	6	70.869
Site Installation Testing	-	-	0.180	-	-	-	-	-	-	-	-	-	-	-	0.360	-	-	1.080
<i>Subtotal: Recurring Cost</i>	-	-	8.990	-	-	-	-	-	-	-	-	-	-	-	29.040	-	-	71.949
<i>Subtotal: Package Fielding - PackageFielding End Item Cost</i>	-	-	8.990	-	-	-	-	-	-	-	-	-	-	-	29.040	-	-	71.949
Support - Support End Item Cost																		
Program Management Administration (PMA)	-	-	1.244	-	-	-	-	-	-	-	-	-	-	-	4.240	-	-	12.204
Fielding Technical Support	-	-	0.340	-	-	-	-	-	-	-	-	-	-	-	0.680	-	-	2.040
Type I Training	-	-	1.270	-	-	-	-	-	-	-	-	-	-	-	2.540	-	-	7.620
<i>Subtotal: Support - Support End Item Cost</i>	-	-	2.854	-	-	-	-	-	-	-	-	-	-	-	7.460	-	-	21.864
Gross/Weapon System Cost	-	-	11.844	-	-	-	-	-	-	-	-	-	-	-	36.500	-	-	93.813

Remarks:

Due to variations between mission specific needs, differences in site specific setup 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.

The FY16 PB described the Geographic AOC fielding plan with installations of 1 / 4 / 1 in FYs 16 / 17 / 18. AOC 10.2 development slips caused the Air Force to reconsider the fielding plan. The revised Geographic AOC fielding plan is 1 / 2 / 3 in FYs 16 / 17 / 18. The Air Force is evaluating the FY18 funding needs to complete this plan.

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 834560 / Air Operations Center (AOC) 10.2	Item Number / Title [DODIC]: - / Air Operations Center (AOC) 10.2
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Initial Fielding ^(†)		2016	TBD / Various	TBD	AFLCMC Hanscom AFB	Jul 2016	Oct 2016	1	10.936	N	Oct 2015	
Initial Fielding ^(†)		2017	TBD / Various	TBD	AFLCMC Hanscom AFB	Oct 2016	Feb 2017	2	11.222	N	Oct 2015	
Initial Fielding ^(†)		2018	TBD / Various	TBD	AFLCMC Hanscom AFB	Oct 2017	Feb 2018	3	2.937	N	Oct 2015	

^(†) indicates the presence of a P-21

Remarks:

Due to variations between mission specific needs, differences in site specific setup 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.

The FY16 PB described the Geographic AOC fielding plan with installations of 1 / 4 / 1 in FYs 16 / 17 / 18. AOC 10.2 development slips caused the Air Force to reconsider the fielding plan. The revised Geographic AOC fielding plan is 1 / 2 / 3 in FYs 16 / 17 / 18. The Air Force is evaluating the FY18 funding needs to complete this plan.

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 834560 / Air Operations Center (AOC) 10.2	Item Number / Title [DODIC]: - / Air Operations Center (AOC) 10.2
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2016												Fiscal Year 2017												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016												Calendar Year 2017												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Initial Fielding																															
1		2016	AF	1	-	1																							A - - - 1		-
1		2017	AF	2	-	2																							A - - - - 1 1		-
1		2018	AF	3	-	3																									3
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3 **P-1 Line Item Number / Title:** 834560 / Air Operations Center (AOC) 10.2 **Item Number / Title [DODIC]:**
- / Air Operations Center (AOC) 10.2

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2018												Fiscal Year 2019												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
Initial Fielding																															
1		2016	AF	1	1	-																							-		
1		2017	AF	2	2	-																							-		
1		2018	AF	3	-	3	A	-	-	-	-	1	1	1															-		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 3	P-1 Line Item Number / Title: 834560 / Air Operations Center (AOC) 10.2	Item Number / Title [DODIC]: - / Air Operations Center (AOC) 10.2
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	TBD - Various	1	4	6	-	-	-	-	-	1	4	5

"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 all quantities are shown in thousands. 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: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
 Equip / BSA 5: Air Force Communications

P-1 Line Item Number / Title:
 835060 / Information Transport Systems

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0303112F

Line Item MDAP/MAIS Code: N78 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	129.836	106.936	74.621	40.043	-	40.043	56.710	58.750	59.787	60.863	407.332	994.878
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	129.836	106.936	74.621	40.043	-	40.043	56.710	58.750	59.787	60.863	407.332	994.878
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	129.836	106.936	74.621	40.043	-	40.043	56.710	58.750	59.787	60.863	407.332	994.878

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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.

BASE INFORMATION TRANSPORT INFRASTRUCTURE (BITI), formerly known as INFORMATION TRANSPORT SYSTEM (ITS): BITI delivers the Air Force cyberspace network and integrated infrastructure for over 170 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 throughput necessary.

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 over 170 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 three Turnkey Modifications started in FY15 and will finish in FY17. After completion of these last Turnkey Modifications, all BITI base work will be Recapitalizations.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 5: Air Force Communications

P-1 Line Item Number / Title:
 835060 / Information Transport Systems

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0303112F

Line Item MDAP/MAIS Code: N78 **Item MDAP/MAIS Code(s):** N/A

BITI Recapitalization: Replaces critical "backbone" infrastructure of network equipment installed as part of Turnkeys on a routine basis for fielded systems for over 170 fixed Air Force installations (active duty, reserve, and Air National Guard (ANG)) and Geographically Separated Units (GSUs) at approved locations.

Funding for this exhibit contained in PE 0303112F.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	102.429	74.621	40.043	-	40.043	19.830	33.027	48.436	43.516
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	4.507	-	-	-	-	36.880	24.431	6.524	14.599
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	1.292	4.827	2.748
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	106.936	74.621	40.043	-	40.043	56.710	58.750	59.787	60.863

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:**
835060 / Information Transport Systems
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

Line Item MDAP/MAIS Code: N78 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	0303112F ITS	P-5a, P-21	A	- / 129.836	- / 106.936	- / 74.621	- / 40.043	- / -	- / 40.043
P-40a	AIR FORCE COMMUNICATIONS (AIRCOM)			- / 0.000	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 129.836	- / 106.936	- / 74.621	- / 40.043	- / -	- / 40.043

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	0303112F ITS	P-5a, P-21	A	- / -	- / -	- / -	- / -	- / -	- / 351.436
P-40a	AIR FORCE COMMUNICATIONS (AIRCOM)			- / 56.710	- / 58.750	- / 59.787	- / 60.863	- / 407.332	- / 643.442
P-40	Total Gross/Weapon System Cost			- / 56.710	- / 58.750	- / 59.787	- / 60.863	- / 407.332	- / 994.878

*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:
BITI: FY17 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: FY17 delivery will modify the complete system infrastructure/equipment on bases that have already received a Turnkey. The last six installations started taking place in FY15 and will finish in FY17.

BITI Recapitalization: FY17 replace BITI Turnkey fielded systems for over 170 fixed Air Force installations.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835060 / Information Transport Systems	Item Number / Title [DODIC]: - / 0303112F ITS
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ID Code (A=Service Ready, B=Not Service Ready) : A **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	129.836	106.936	74.621	40.043	-	40.043	-	-	-	-	-	351.436
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	129.836	106.936	74.621	40.043	-	40.043	-	-	-	-	-	351.436
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	129.836	106.936	74.621	40.043	-	40.043	-	-	-	-	-	351.436

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost Cost																		
Recurring Cost																		
BITI Turnkey Projects - AD Site Survey	0.687	21	14.435	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BITI Turnkey Projects - AD Installation ^(†)	4.170	12	50.042	5.345	4	21.380	-	-	-	-	-	-	-	-	-	-	-	-
BITI Turnkey Projects - Reserve Site Survey	0.381	5	1.903	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BITI Turnkey Projects - Reserve Installation ^(†)	2.083	2	4.166	2.254	2	4.507	-	-	-	-	-	-	-	-	-	-	-	-
BITI Turnkey Modernization AD Site Survey	2.698	1	2.698	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BITI Turnkey Modernization AD Installation ^(†)	7.034	3	21.102	3.068	2	6.136	-	-	-	-	-	-	-	-	-	-	-	-
BITI Recapitalization AD ^(†)	-	-	-	0.681	44	29.976	1.052	18	18.929	1.819	2	3.637	-	-	-	1.819	2	3.637
BITI Recapitalization Reserve ^(†)	-	-	-	0.486	5	2.428	-	-	-	-	-	-	-	-	-	-	-	-
BITI Enterprise Recapitalization	-	-	-	-	-	21.180	-	-	41.640	-	-	22.238	-	-	-	-	-	22.238

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5						P-1 Line Item Number / Title: 835060 / Information Transport Systems						Item Number / Title [DODIC]: - / 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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AFGSC Telephone Requirement	-	-	-	-	-	10.000	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	94.346	-	-	95.607	-	-	60.569	-	-	25.875	-	-	-	-	-	25.875
<i>Subtotal: Hardware - Hardware End Item Cost Cost</i>	-	-	94.346	-	-	95.607	-	-	60.569	-	-	25.875	-	-	-	-	-	25.875
Support - Support End Item Cost Cost																		
BITI Direct Mission Support (DMS)	-	-	19.261	-	-	8.516	-	-	5.869	-	-	5.916	-	-	-	-	-	5.916
BITI Program Management Administration Contractor Services	-	-	14.689	-	-	2.558	-	-	7.888	-	-	7.952	-	-	-	-	-	7.952
BITI Other PMA Government Costs	-	-	1.540	-	-	0.255	-	-	0.295	-	-	0.300	-	-	-	-	-	0.300
<i>Subtotal: Support - Support End Item Cost Cost</i>	-	-	35.490	-	-	11.329	-	-	14.052	-	-	14.168	-	-	-	-	-	14.168
Gross/Weapon System Cost	-	-	129.836	-	-	106.936	-	-	74.621	-	-	40.043	-	-	-	-	-	40.043

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost Cost																		
Recurring Cost																		
BITI Turnkey Projects - AD Site Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.687	21	14.435
BITI Turnkey Projects - AD Installation ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.464	16	71.422
BITI Turnkey Projects - Reserve Site Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.381	5	1.903
BITI Turnkey Projects - Reserve Installation ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.168	4	8.673
BITI Turnkey Modernization AD Site Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.698	1	2.698
BITI Turnkey Modernization AD Installation ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.448	5	27.238

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5 **P-1 Line Item Number / Title:** 835060 / Information Transport Systems **Item Number / Title [DODIC]:** - / 0303112F ITS

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

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
BITI Recapitalization AD ^(t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.821	64	52.542
BITI Recapitalization Reserve ^(t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.486	5	2.428
BITI Enterprise Recapitalization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85.058
AFGSC Telephone Requirement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.000
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276.397
<i>Subtotal: Hardware - Hardware End Item Cost Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276.397
Support - Support End Item Cost Cost																		
BITI Direct Mission Support (DMS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.562
BITI Program Management Administration Contractor Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.087
BITI Other PMA Government Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.390
<i>Subtotal: Support - Support End Item Cost Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.039
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	351.436

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 & PMA) is combined Operations & Support and Acquisition cost.

PROGRAM MANAGEMENT ADMINISTRATION (PMA): PMA BITI program supports the operation of the program office in its management and oversight role. PMA 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.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835060 / Information Transport Systems	Item Number / Title [DODIC]: - / 0303112F ITS
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ID Code (A=Service Ready, B=Not Service Ready) : A **MDAP/MAIS Code:**

	Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	102.429	74.621	40.043	-	40.043	-	-	-	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	4.507	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	106.936	74.621	40.043	-	40.043	-	-	-	-

(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835060 / Information Transport Systems	Item Number / Title [DODIC]: - / 0303112F ITS
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
BITI Turnkey Projects - AD Installation ^(†)		2015	VARIOUS/MULTIPLE / VARIOUS/MULTIPLE	C / FFP	AFLCMC Hanscom AFB	Aug 2015	Aug 2016	4	5.345	Y		Jan 2015
BITI Turnkey Projects - Reserve Installation ^(†)		2015	VARIOUS/MULTIPLE / VARIOUS/MULTIPLE	C / FFP	AFLCMC Hanscom AFB	Jul 2015	Jul 2016	2	2.254	Y		Oct 2014
BITI Turnkey Modernization AD Installation ^(†)		2015	VARIOUS/MULTIPLE / VARIOUS/MULTIPLE	C / FFP	AFLCMC Hanscom AFB	Feb 2016	Feb 2017	2	3.068	Y		Feb 2015
BITI Recapitalization AD ^(†)		2015	VARIOUS/MULTIPLE / VARIOUS/MULTIPLE	C / FFP	AFLCMC Hanscom AFB	Apr 2015	Apr 2016	44	0.681	Y		Feb 2015
BITI Recapitalization AD ^(†)		2016	VARIOUS/MULTIPLE / VARIOUS/MULTIPLE	C / FFP	AFLCMC Hanscom AFB	Apr 2016	Apr 2017	18	1.052	Y		Feb 2016
BITI Recapitalization AD ^(†)		2017	VARIOUS/MULTIPLE / VARIOUS/MULTIPLE	C / FFP	AFLCMC Hanscom AFB	Jan 2017	Jan 2018	2	1.819	Y		Aug 2016
BITI Recapitalization Reserve ^(†)		2015	VARIOUS/MULTIPLE / VARIOUS/MULTIPLE	C / FFP	AFLCMC Hanscom AFB	Apr 2015	Apr 2016	5	0.486	Y		Feb 2015

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835060 / Information Transport Systems	Item Number / Title [DODIC]: - / 0303112F ITS
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Cost Elements <i>(Units in Each)</i>						Fiscal Year 2017												Fiscal Year 2018												BALANCE	
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017												Calendar Year 2018												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
BITI Turnkey Projects - AD Installation																															
Prior Years Deliveries: 12																															
1	2015	AF		4	1	3	-	-	1	1	1																	-			
BITI Turnkey Projects - Reserve Installation																															
Prior Years Deliveries: 2																															
2	2015	AF		2	2	-																						-			
BITI Turnkey Modernization AD Installation																															
Prior Years Deliveries: 3																															
3	2015	AF		2	-	2	-	-	-	-	1	1																-			
BITI Recapitalization AD																															
4	2015	AF		44	24	20	4	4	4	4	4																	-			
4	2016	AF		18	-	18	-	-	-	-	-	2	2	2	3	3	2	2	2									-			
4	2017	AF		2	-	2				A	-	-	-	-	-	-	-	-	-	-	-					2		-			
BITI Recapitalization Reserve																															
5	2015	AF		5	5	-																						-			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5 **P-1 Line Item Number / Title:** 835060 / Information Transport Systems **Item Number / Title [DODIC]:**
- / 0303112F ITS

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	VARIOUS/MULTIPLE - VARIOUS/MULTIPLE	-	3	7	-	11	12	23	-	-	-	-
2	VARIOUS/MULTIPLE - VARIOUS/MULTIPLE	-	3	7	-	10	12	22	-	-	-	-
3	VARIOUS/MULTIPLE - VARIOUS/MULTIPLE	-	3	7	-	17	12	29	-	-	-	-
4	VARIOUS/MULTIPLE - VARIOUS/MULTIPLE	-	1	2	-	4	12	16	-	-	-	-
5	VARIOUS/MULTIPLE - VARIOUS/MULTIPLE	-	1	2	-	7	12	19	-	-	-	-

"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 all quantities are shown in thousands. 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 Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5						P-1 Line Item Number / Title: 835060 / Information Transport Systems						Aggregated Modification Items Title: AIR FORCE COMMUNICATIONS (AIRCOM)							

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
BITI Modification 1 / BITI Mod/Recaps			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
AFNG				-	-		-	-		-	-		-	-		-	-		-	-
AFR				-	-		-	-		-	-		-	-		-	-		-	-
Total			-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
BITI Modification 1 / BITI Mod/Recaps			-	-	56.710	-	-	58.750	-	-	59.787	-	-	60.863	-	-	407.332	-	-	643.442
<i>Secondary Distribution</i>																				
AF				-	19.830		-	33.027		-	48.436		-	43.516		-	-		-	-
AFNG				-	36.880		-	24.431		-	6.524		-	14.599		-	-		-	-
AFR				-	-		-	1.292		-	4.827		-	2.748		-	-		-	-
Total			-	-	56.710	-	-	58.750	-	-	59.787	-	-	60.863	-	-	407.332	-	-	643.442

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
BITI Modification 1 / BITI Mod/Recaps	BITI	Capability Improvement

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications / Equip / BSA 5: Air Force Communications
P-1 Line Item Number / Title: 835080 / AFNET

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0208088F, 0303089F, 0303112F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	90.487	98.518	146.897	-	146.897	226.174	186.761	128.380	128.238	-	1,005.455
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	90.487	98.518	146.897	-	146.897	226.174	186.761	128.380	128.238	-	1,005.455
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	90.487	98.518	146.897	-	146.897	226.174	186.761	128.380	128.238	-	1,005.455

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

No efforts within this exhibit are new starts.

The AFNet exhibit includes both weapon system and non-weapon system requirements. In FY16, all AFNet weapon systems began a transition into new PEs. 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). Requirements for ACD are transitioning to PE 0208088F and CSCS & AFINC are transitioning to 0303089F.

AFNet provides Commercial Off-The-Shelf (COTS) solutions to implement, deliver and upgrade installation processing nodes and boundaries, AF Gateways, 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, training equipment/systems, associated training and interim contractor support. Procurements implement technology and capabilities within the AFNet in accordance with the DoD IT Road map, 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, AF NETWORK 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, AF DEFENSIVE CYBERSPACE OPERATIONS (ACD) WEAPON SYSTEM

This PE is not a new start. Requirements for ACD have been funded previously in 0303112F and 0207425F as part of the AFNet 835080 P-Doc. Funds may be used for other AFNet requirements if required.

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,

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 5: Air Force Communications		P-1 Line Item Number / Title: 835080 / AFNET
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0208088F, 0303089F, 0303112F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>assessment, process management, blocking, vulnerability identification, investigation and containment. In addition, the ACD provides CNDSP (Computer Network Defense 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:</p> <p>Host Based Security System upgrades, Next Generation Firewall and Full Packet Capture and Data Analytics Enterprise.</p> <p>PE 0301400F, SPACE SUPERIORITY INTELLIGENCE</p> <p>This PE executes requirements for SSI. Funds may be used for other AFNet requirements if required.</p> <p>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.</p> <p>PE 0303089F, CYBERSPACE OPERATIONS SYSTEMS</p> <p>This PE executes requirements for both AFINC and CSCS weapon systems. Funds may be used for other AFNet requirements if required.</p> <p>(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). 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. Funding enables modification and equipment replacement for the system and its sub-components to respond to growing mission requirements and evolving cyber threats. Includes recapitalization of the Integrated Management System (IMS), which provides for real-time centralized 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).</p> <p>(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:</p> <p>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.</p> <p>PE 0303112F, AIR FORCE COMMUNICATION (AIRCOM)</p> <p>In FY17, funding in this PE will reallocate 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, AF will realign funding into the weapon system PEs in a future budget cycle.</p> <p>Funding for this exhibit contained in PEs 0204725F, 0208088F, 0301400F, 0303089F, 0303112F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 835080 / AFNET
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:** 0208088F, 0303089F, 0303112F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	AF Network Ops and Command Comms			- / 0.000	- / -	- / 49.049	- / -	- / -	- / -
P-3a	1 / ACD WS 0208088F (Reliability & Maintainability)			- / -	- / -	- / -	- / 7.736	- / -	- / 7.736
P-5	Space Superiority Intelligence		A	- / -	- / -	- / 2.337	- / 5.110	- / -	- / 5.110
P-3a	1 / AFINC/CSCS WS 0303089 (Reliability & Maintainability)			- / -	- / -	- / 17.684	- / 105.586	- / -	- / 105.586
P-3a	1 / AFNET (Reliability & Maintainability)			- / -	- / 90.487	- / 29.448	- / 28.465	- / -	- / 28.465
P-40a	Joint Information Environment (JIE)			- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 90.487	- / 98.518	- / 146.897	- / -	- / 146.897

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	AF Network Ops and Command Comms			- / -	- / -	- / -	- / -	- / -	- / 49.049
P-3a	1 / ACD WS 0208088F (Reliability & Maintainability)			- / 21.533	- / 21.931	- / 22.330	- / 22.731	- / -	- / 96.261
P-5	Space Superiority Intelligence		A	- / 11.336	- / 9.287	- / 9.480	- / 9.651	- / -	- / 47.201
P-3a	1 / AFINC/CSCS WS 0303089 (Reliability & Maintainability)			- / 120.753	- / 99.385	- / 77.331	- / 78.650	- / -	- / 499.389
P-3a	1 / AFNET (Reliability & Maintainability)			- / 38.905	- / 40.192	- / 8.125	- / 7.810	- / -	- / 243.432
P-40a	Joint Information Environment (JIE)			- / 33.647	- / 15.966	- / 11.114	- / 9.396	- / -	- / 70.123
P-40	Total Gross/Weapon System Cost			- / 226.174	- / 186.761	- / 128.380	- / 128.238	- / -	- / 1,005.455

*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:
 FY17 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

Procures and installs AFNet/Weapon System requirements in FY16. No budget year (FY17) funding requested.

PE 0208088F, AF DEFENSIVE CYBERSPACE OPERATIONS (ACD) WEAPON SYSTEM

Procures and installs active defensive counter cyberspace systems and situational awareness capabilities.

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).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 5: Air Force Communications		P-1 Line Item Number / Title: 835080 / AFNET
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0208088F, 0303089F, 0303112F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>PE 0303089F, CYBERSPACE OPERATIONS SYSTEMS</p> <p>(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).</p> <p>(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).</p> <p>PE 0303112F, AIR FORCE COMMUNICATION (AIRCOM)</p> <p>In FY17, funding in this PE will reallocate 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, AF will realign funding into the weapon system PEs in a future budget cycle.</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force													Date: February 2016					
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						

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AFNET Ops and Command Comms / AFNET Ops and Command Comms			-	-	-	-	-	-	-	-	49.049	-	-	-	-	-	-	-	-	-
Total			-	-	0.000	-	-	-	-	-	49.049	-	-	-	-	-	-	-	-	-

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AFNET Ops and Command Comms / AFNET Ops and Command Comms			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.049
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.049

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 / AFNET Ops and Command Comms	ACD-AFINC-CSCS	Reliability & Maintainability

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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5				P-1 Line Item Number / Title: 835080 / AFNET				Modification Number / Title: 1 / ACD WS 0208088F				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	7.736	-	7.736	21.533	21.931	22.330	22.731	-	96.261
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	7.736	-	7.736	21.533	21.931	22.330	22.731	-	96.261
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	7.736	-	7.736	21.533	21.931	22.330	22.731	-	96.261

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This PE is not a new start.

The AFNet exhibit includes both weapon system and non-weapon system requirements.

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 P-Doc. 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.

FY17 funds will procure updates via 1067s request for ACD which includes, but is not limited to, Host Based Security System upgrades and Data Analytics.

Milestone/Development Status

Sustainment

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5					P-1 Line Item Number / Title: 835080 / AFNET					Modification Number / Title: 1 / ACD WS 0208088F			
Models of Systems Affected: ACD				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0303112F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: ACD MODs</i>													
B Kits													
Recurring													
ACD MODs:EQUIPMENT Group B (Active)	- / -	- / -	- / -	1 / 6.376	- / -	1 / 6.376	1 / 17.744	1 / 18.072	1 / 18.401	1 / 18.731	- / -	5 / 79.324	
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 6.376	- / -	- / 6.376	- / 17.744	- / 18.072	- / 18.401	- / 18.731	- / -	- / 79.324	
<i>Subtotal: ACD MODs</i>	- / -	- / -	- / -	- / 6.376	- / -	- / 6.376	- / 17.744	- / 18.072	- / 18.401	- / 18.731	- / -	- / 79.324	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / 6.376	- / -	- / 6.376	- / 17.744	- / 18.072	- / 18.401	- / 18.731	- / -	- / 79.324	
Support (All Modification Items)													
PMA - Contractor Services	- / -	- / -	- / -	- / 0.734	- / -	- / 0.734	- / 2.045	- / 2.083	- / 2.121	- / 2.159	- / -	- / 9.142	
PMA - Other Gov't Costs	- / -	- / -	- / -	- / 0.626	- / -	- / 0.626	- / 1.744	- / 1.776	- / 1.808	- / 1.841	- / -	- / 7.795	
<i>Subtotal: Support</i>	- / -	- / -	- / -	- / 1.360	- / -	- / 1.360	- / 3.789	- / 3.859	- / 3.929	- / 4.000	- / -	- / 16.937	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	-	7.736	-	7.736	21.533	21.931	22.330	22.731	-	96.261	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835080 / AFNET	Modification Number / Title: 1 / ACD WS 0208088F
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Modification Item 1 of 1: ACD MODs

Manufacturer Information

Manufacturer Name: Multiple	Manufacturer Location: Various
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Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 12
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			May 2017	May 2018	May 2019	May 2020	May 2021
Delivery Dates			May 2018	May 2019	May 2020	May 2021	May 2022

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 5
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UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5 **P-1 Line Item Number / Title:** 835080 / AFNET **Item Number / Title [DODIC]:**
- / Space Superiority Intelligence

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	2.337	5.110	-	5.110	11.336	9.287	9.480	9.651	-	47.201
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	2.337	5.110	-	5.110	11.336	9.287	9.480	9.651	-	47.201
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	2.337	5.110	-	5.110	11.336	9.287	9.480	9.651	-	47.201

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - AF Cyber ISR Platform Cost																		
Non Recurring Cost																		
Prime Contractor	-	-	-	-	-	-	1.469	1	1.469	4.235	1	4.235	-	-	-	4.235	1	4.235
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	-	-	-	1.469	-	-	4.235	-	-	-	-	-	4.235
<i>Subtotal: Hardware - AF Cyber ISR Platform Cost</i>	-	-	-	-	-	-	-	-	1.469	-	-	4.235	-	-	-	-	-	4.235
Support - AF Cyber ISR Platform Cost																		
PMA Contractor Support	-	-	-	-	-	-	-	-	0.868	-	-	0.875	-	-	-	-	-	0.875
<i>Subtotal: Support - AF Cyber ISR Platform Cost</i>	-	-	-	-	-	-	-	-	0.868	-	-	0.875	-	-	-	-	-	0.875
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	2.337	-	-	5.110	-	-	-	-	-	5.110

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - AF Cyber ISR Platform Cost																		
Non Recurring Cost																		
Prime Contractor	10.316	1	10.316	8.452	1	8.452	8.627	1	8.627	8.783	1	8.783	-	-	-	6.980	6	41.882
<i>Subtotal: Non Recurring Cost</i>	-	-	10.316	-	-	8.452	-	-	8.627	-	-	8.783	-	-	-	-	-	41.882

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835080 / AFNET	Item Number / Title [DODIC]: - / Space Superiority Intelligence
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ID Code (A=Service Ready, B=Not Service Ready) : A **MDAP/MAIS Code:**

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Hardware - AF Cyber ISR Platform Cost</i>	-	-	10.316	-	-	8.452	-	-	8.627	-	-	8.783	-	-	-	-	-	41.882
<i>Support - AF Cyber ISR Platform Cost</i>																		
PMA Contractor Support	-	-	1.020	-	-	0.835	-	-	0.853	-	-	0.868	-	-	-	-	-	5.319
<i>Subtotal: Support - AF Cyber ISR Platform Cost</i>	-	-	1.020	-	-	0.835	-	-	0.853	-	-	0.868	-	-	-	-	-	5.319
Gross/Weapon System Cost	-	-	11.336	-	-	9.287	-	-	9.480	-	-	9.651	-	-	-	-	-	47.201

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016	
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5				P-1 Line Item Number / Title: 835080 / AFNET						Modification Number / Title: 1 / AFINC/CSCS WS 0303089	

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	17.684	105.586	-	105.586	120.753	99.385	77.331	78.650	-	499.389
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	17.684	105.586	-	105.586	120.753	99.385	77.331	78.650	-	499.389
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	17.684	105.586	-	105.586	120.753	99.385	77.331	78.650	-	499.389

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

No efforts within this exhibit are new starts.

The AFNet exhibit includes both weapon system and non-weapon system requirements.

This PE executes requirements for both CSCS and 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 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. Funding enables modification and equipment replacement for the system and its sub-components to respond to growing mission requirements and evolving cyber threats. Includes recapitalization of the Integrated Management System (IMS), which provides for real-time centralized 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). Includes recapitalization of the Integrated Management System (IMS), which provides for real-time centralized management of network devices, and unifies the management/defense of AF networks and assets.

(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.

FY17 will procure upgrades for CSCS and AFINC base on 1067 requests. CSCS includes, but is not limited to, ACAS upgrades, Area Processing Center and Regional Data Center Consolidations, and Installation Processing Note (IPN) Boundary Effort modification. AFINC includes, but is not limited to, Gateway e-mail security/DNS upgrades.

Milestone/Development Status

Sustainment

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5					P-1 Line Item Number / Title: 835080 / AFNET					Modification Number / Title: 1 / AFINC/CSCS WS 0303089			
Models of Systems Affected: AFINC-CSCS-WS				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0303112F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: AFINC/CSCS WS MODs</i>													
B Kits													
Recurring													
AFINC/CSCS WS MODs:EQUIPMENT Group B (Active)	- / -	- / -	1 / 14.573	1 / 87.004	- / -	1 / 87.004	1 / 99.502	1 / 81.894	1 / 63.722	1 / 64.809	- / -	6 / 411.504	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 14.573	- / 87.004	- / -	- / 87.004	- / 99.502	- / 81.894	- / 63.722	- / 64.809	- / -	- / 411.504	
<i>Subtotal: AFINC/CSCS WS MODs</i>	- / -	- / -	- / 14.573	- / 87.004	- / -	- / 87.004	- / 99.502	- / 81.894	- / 63.722	- / 64.809	- / -	- / 411.504	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 14.573	- / 87.004	- / -	- / 87.004	- / 99.502	- / 81.894	- / 63.722	- / 64.809	- / -	- / 411.504	
Support (All Modification Items)													
PMA - Contractor Services	- / -	- / -	- / 1.679	- / 10.030	- / -	- / 10.030	- / 11.471	- / 9.441	- / 7.346	- / 7.471	- / -	- / 47.438	
PMA - Other Gov't Costs	- / -	- / -	- / 1.432	- / 8.552	- / -	- / 8.552	- / 9.780	- / 8.050	- / 6.263	- / 6.370	- / -	- / 40.447	
<i>Subtotal: Support</i>	- / -	- / -	- / 3.111	- / 18.582	- / -	- / 18.582	- / 21.251	- / 17.491	- / 13.609	- / 13.841	- / -	- / 87.885	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	17.684	105.586	-	105.586	120.753	99.385	77.331	78.650	-	499.389	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835080 / AFNET	Modification Number / Title: 1 / AFINC/CSCS WS 0303089
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Modification Item 1 of 1: AFINC/CSCS WS MODs

Manufacturer Information

Manufacturer Name: Multiple	Manufacturer Location: Various
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Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 12
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates		May 2016	May 2017	May 2018	May 2019	May 2020	May 2021
Delivery Dates		May 2017	May 2018	May 2019	May 2020	May 2021	May 2022

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835080 / AFNET	Modification Number / Title: 1 / AFNET
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	90.487	29.448	28.465	-	28.465	38.905	40.192	8.125	7.810	-	243.432
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	-	90.487	29.448	28.465	-	28.465	38.905	40.192	8.125	7.810	-	243.432
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	-	90.487	29.448	28.465	-	28.465	38.905	40.192	8.125	7.810	-	243.432

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY17 will procure updates for AFNet via 1067 requests which includes, but is not limited to, Host Based Security System upgrades, Enclave Control Nodes, AFNet Infrastructure, AFNet Gateways, AF Vulnerability Management, and Data Center Consolidation.

Milestone/Development Status

Sustainment

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5					P-1 Line Item Number / Title: 835080 / AFNET					Modification Number / Title: 1 / AFNET			
Models of Systems Affected: AFNET				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0208088F, 0303089F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1:</i> AFNET Mod													
B Kits													
Recurring													
AFNET Mod:EQUIPMENT Group B (Active)	- / -	1 / 74.479	1 / 24.266	1 / 23.456	- / -	1 / 23.456	1 / 32.059	1 / 33.119	1 / 6.696	1 / 6.437	- / -	7 / 200.512	
<i>Subtotal: Recurring</i>	- / -	- / 74.479	- / 24.266	- / 23.456	- / -	- / 23.456	- / 32.059	- / 33.119	- / 6.696	- / 6.437	- / -	- / 200.512	
<i>Subtotal: AFNET Mod</i>	- / -	- / 74.479	- / 24.266	- / 23.456	- / -	- / 23.456	- / 32.059	- / 33.119	- / 6.696	- / 6.437	- / -	- / 200.512	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / 74.479	- / 24.266	- / 23.456	- / -	- / 23.456	- / 32.059	- / 33.119	- / 6.696	- / 6.437	- / -	- / 200.512	
Support (All Modification Items)													
PMA - Contractor Services	- / -	- / 8.602	- / 2.797	- / 2.704	- / -	- / 2.704	- / 3.695	- / 3.818	- / 0.771	- / 0.741	- / -	- / 23.128	
PMA - Other Gov't Costs	- / -	- / 17.406	- / 2.385	- / 2.305	- / -	- / 2.305	- / 3.151	- / 3.255	- / 0.658	- / 0.632	- / -	- / 19.792	
<i>Subtotal: Support</i>	- / -	- / 16.008	- / 5.182	- / 5.009	- / -	- / 5.009	- / 6.846	- / 7.073	- / 1.429	- / 1.373	- / -	- / 42.920	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	90.487	29.448	28.465	-	28.465	38.905	40.192	8.125	7.810	-	243.432	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835080 / AFNET	Modification Number / Title: 1 / AFNET
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Modification Item 1 of 1: AFNET Mod

Manufacturer Information

Manufacturer Name: Multiple	Manufacturer Location: N/A
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Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 12
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	May 2015	May 2016	May 2017	May 2018	May 2019	May 2020	May 2021
Delivery Dates	May 2016	May 2017	May 2018	May 2019	May 2020	May 2021	May 2022

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 2
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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5 **P-1 Line Item Number / Title:** 835080 / AFNET **Aggregated Items Title:** Joint Information Environment (JIE)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Prime Contractor																				
JIE Prime Contractor Procurement	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Prime Contractor			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Prime Contractor																				
JIE Prime Contractor Procurement	A		33.647	1	33.647	15.966	1	15.966	11.114	1	11.114	9.396	1	9.396	-	-	-	17.531	4	70.123
Subtotal: Prime Contractor			-	-	33.647	-	-	15.966	-	-	11.114	-	-	9.396	-	-	-	-	-	70.123
Total			-	-	33.647	-	-	15.966	-	-	11.114	-	-	9.396	-	-	-	-	-	70.123

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:**
 835110 / Joint Communications Support Element (JCSE)
 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	5.199	5.182	-	5.182	5.086	5.175	5.267	5.362	-	31.271
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	5.199	5.182	-	5.182	5.086	5.175	5.267	5.362	-	31.271
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	5.199	5.182	-	5.182	5.086	5.175	5.267	5.362	-	31.271

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 war-fighter'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. The 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), the Air Force is mandated to fund 1 /3rd fair share of JCSE's validated equipment replacement plan.

Funding for this exhibit is contained in PE 0207422F, Deployable Command, Control, and Communications (C3) Systems.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 5: Air Force Communications **P-1 Line Item Number / Title:** 835110 / Joint Communications Support Element (JCSE)

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Joint Communications Support Element (JCSE)			- / 0.000	- / -	- / 5.199	- / 5.182	- / -	- / 5.182
P-40	Total Gross/Weapon System Cost			- / 0.000	- / -	- / 5.199	- / 5.182	- / -	- / 5.182

*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:
 JCSE: FY2017 base funding in the amount of \$5.182M procures communications equipment based on Strategic Planning Guidance; which includes the maximum capabilities for large and small aperture mobile satellite systems, Everything over Internet Protocol (EoIP), Airborne/En-Route, and terrestrial and single-channel equipment. Currently employed commercial-off-the-shelf (COTS) equipment is approaching the end of its life cycle and requires replacement to meet the program goals which include meeting emerging real-world operational requirements with maximum capabilities, smallest possible footprint, lowest operations and maintenance costs, and seamless integration with the global information grid. This equipment is a critical part of Command and Control 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 replacement plan. JCSE's Program is built/restructured based on Combatant Command (CCMD) and Service Components' requirements and emerging technologies. Service's influence JCSE's spending plan through recommendations in concert with MDAP schedules, ensuring that Service dollars meet Joint Service requirements.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5							P-1 Line Item Number / Title: 835110 / Joint Communications Support Element (JCSE)							Aggregated Items Title: Joint Communications Support Element (JCSE)					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
JCSE																				
JCSE Deployable C3 Systems	A		-	-	0.000	-	-	-	5.199	1	5.199	5.182	1	5.182	-	-	-	5.182	1	5.182
Subtotal: JCSE			-	-	0.000	-	-	-	-	-	5.199	-	-	5.182	-	-	-	-	-	5.182
Total			-	-	0.000	-	-	-	-	-	5.199	-	-	5.182	-	-	-	-	-	5.182

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:**
 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	16.342	25.780	13.418	-	13.418	18.541	17.334	17.638	17.955	-	127.008
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	16.342	25.780	13.418	-	13.418	18.541	17.334	17.638	17.955	-	127.008
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	16.342	25.780	13.418	-	13.418	18.541	17.334	17.638	17.955	-	127.008

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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.

USCENTCOM COMMAND AND CONTROL SYSTEMS: Effort will provide end of life cycle 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 USCENTCOM

Refurbishes Deployable Tactical Air Navigation (DTACAN) Systems

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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	USCENTCOM Communications			- / 0.000	- / 3.823	- / 2.509	- / 4.736	- / -	- / 4.736
P-40a	Service Support to USCENTCOM - Communications			- / 0.000	- / 12.519	- / 10.191	- / 8.682	- / -	- / 8.682
P-40a	MQ-9 UAV			- / 0.000	- / -	- / 13.080	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 16.342	- / 25.780	- / 13.418	- / -	- / 13.418

*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, PE 0205219F P-40A Item Contractor Service, is a new start.

PE 0201122F USCENTCOM COMMUNICATIONS

USCENTCOM COMMAND AND CONTROL SYSTEMS: FY17 funding will procure C4 equipment items required for HQ USCENTCOM, MacDill AFB, FL, Disaster Recovery Site (Site X), and CENTCOM Forward HQ at Al Udeid, Qatar, to effectively conduct communications support missions impacting Command and Control (C2) and operational missions conducted by the Commander and staff. The C4/Information Technology (IT) supporting the command must be replaced to meet the ever increasing demands of current, ongoing contingency operations, and the growth of data storage requirements. Without OPAF funding, the vital end of life replacement of communications equipment directly supporting all C2 and C4 operations will be at significant risk and will catastrophically affect the ability of the ongoing contingency operational missions across the AOR.

STORAGE CAPABILITIES: HQ CENTCOM and CENTCOM Forward HQ require maximum storage capabilities to maintain a level of readiness, reduce server footprint, and continue capabilities as they are implemented.

PE 0201131F AIR COMBAT COMMAND (ACC) COMMUNICATIONS FY17 funds will provide:

BASE COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, AND INTELLIGENCE (C4I) INFRASTRUCTURE. This FY17 effort will support communications CENTCOM Theater Posture Plan (TPP) locations identified for post OEF support. This effort is required at several AFCENT locations in the AOR and will provide critical infrastructure to support the transition to the Joint Information Environment, as required by DoD CIO mandate.

SWA-THEATER ENTERPRISE REQUIREMENTS - To meet Unified Capabilities (UC) requirements as required by DoD mandate, and USCENTCOM FRAGO directing components to transition to an IP-converged architecture by 2017, AFCENT must replace legacy Promina equipment at GSUs. AFCENT must also procure new systems to support contingency operations and base opening/closure requirements, which average 2 base openings and/or closures per year regardless of new or ongoing contingencies.

JOINT INFORMATION ENVIRONMENT: Implementation of JIE at MacDill AFB with CENTCOM acting as the possible regional node.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 5: Air Force Communications		P-1 Line Item Number / Title: 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	Item MDAP/MAIS Code(s): N/A	
<p>FY17 effort will continue to support infrastructure and services essential secure networks for bilateral and multilateral information up to the secret releasable level. Support the networks and cross domain solution necessary to securely and safely integrate coalition sensors and C2 capabilities with or C2 efforts. Includes integration of Coalition LNOs into our Combined Air Operations Center at AUAB</p> <p>USCENTCOM. FY17 funding Refurbishes of Deployable Tactical Air Navigation (DTACAN) Systems</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5	P-1 Line Item Number / Title: 835140 / USCENTCOM	Aggregated Items Title: USCENTCOM Communications
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
USCENTCOM COMMAND AND CONTROL SYSTEM	A		-	-	0.000	-	-	3.823	2.509	1	2.509	4.736	1	4.736	-	-	-	4.736	1	4.736
Subtotal: Uncategorized			-	-	0.000	-	-	3.823	-	-	2.509	-	-	4.736	-	-	-	-	-	4.736
Total			-	-	0.000	-	-	3.823	-	-	2.509	-	-	4.736	-	-	-	-	-	4.736

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

Remarks:

USCENTCOM: FY17 procurement funds in the amount of \$2.921M will procure C4 equipment items required for HQ USCENTCOM, MacDill AFB, FL and CENTCOM Forward HQ at Al Udeid, Qatar. Funding is vital to effectively conduct communications support missions impacting Command and Control (C2) and operational missions conducted by the Commander and staff supporting the Command's CONPLAN/OPLANS. The C4/Information Technology (IT) supporting the command must be replaced to meet the ever increasing demands of enduring operations and the growth of data storage requirements, as well as emergent cyber threats. Without OPAF funding, the vital life cycle replacement of communications equipment directly supporting all C2 and C4 operations will be at significant risk and will catastrophically affect the ability of enduring operational missions across the AOR.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5							P-1 Line Item Number / Title: 835140 / USCENTCOM							Aggregated Items Title: Service Support to USCENTCOM - Communications					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
AIR TRAFFIC CONTROL SYSTEMS FOR AFGHANISTAN	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deployable Tactical Air Navigation (DTACAN)	A		-	-	-	-	-	-	-	-	3.800	1	3.800	-	-	-	3.800	1	3.800	-
DEPLOYABLE Ku-BAND EARTH TERMINAL (DKET) REPLACEMENT	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BASE C4I SUPPORT	A		-	-	0.000	0.875	6	5.250	0.561	5	2.803	0.300	5	1.500	-	-	-	0.300	5	1.500
SWA-THEATER ENTERPRISE REQUIREMENTS	A		-	-	0.000	1.500	2	3.000	1.500	2	3.000	0.417	3	1.250	-	-	-	0.417	3	1.250
JOINT INFORMATION ENVIRONMENT CAPABILITIES	A		-	-	0.000	0.505	6	3.030	0.505	7	3.535	0.233	6	1.400	-	-	-	0.233	6	1.400
AFCENT PMA Other Government Costs	A		-	-	0.000	-	-	0.239	-	-	0.250	-	-	0.490	-	-	-	-	-	0.490
AFCENT PMA Contract Service	A		-	-	0.000	-	-	1.000	-	-	0.603	-	-	0.242	-	-	-	-	-	0.242
Subtotal: Uncategorized			-	-	0.000	-	-	12.519	-	-	10.191	-	-	8.682	-	-	-	-	-	8.682
Total			-	-	0.000	-	-	12.519	-	-	10.191	-	-	8.682	-	-	-	-	-	8.682

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

Remarks:

- a. Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items
- b. End of life or Capital equipment replacement

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 5 **P-1 Line Item Number / Title:** 835140 / USCENTCOM **Aggregated Items Title:** MQ-9 UAV

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware																				
Relay site equipment	A		-	-	0.000	-	-	-	3.000	1	3.000	-	-	-	-	-	-	-	-	-
Squadron Operations Center equipment	A		-	-	-	-	-	-	8.154	1	8.154	-	-	-	-	-	-	-	-	-
Subtotal: Hardware			-	-	0.000	-	-	-	-	-	11.154	-	-	-	-	-	-	-	-	-
PMA																				
Contractor Service	A		-	-	0.000	-	-	-	-	-	1.876	-	-	-	-	-	-	-	-	-
Other Government Services	A		-	-	0.000	-	-	-	-	-	0.050	-	-	-	-	-	-	-	-	-
Subtotal: PMA			-	-	0.000	-	-	-	-	-	1.926	-	-	-	-	-	-	-	-	-
Total			-	-	0.000	-	-	-	-	-	13.080	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
 Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
 836700 / Family of Beyond Line-of-Sight Terminals

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0303001F **Other Related Program Elements:** 0303601F

Line Item MDAP/MAIS Code: 199 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	52.278	-	-	-	-	-	-	-	-	84.900	137.178
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	52.278	-	-	-	-	-	-	-	-	84.900	137.178
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	52.278	-	-	-	-	-	-	-	-	84.900	137.178

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	12.112	44.436	-	-	-	-	-	-	-	-	56.548
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) program replaces legacy Milstar terminals and will provide Extremely High Frequency (EHF), protected high data rate communication for nuclear and conventional forces to include Presidential and National Voice Conferencing (PNVC). FAB-T will provide this new, highly secure, state-of-the-art capability for DoD platforms to include strategic platforms and airborne/ground command posts via Milstar, AEHF, and Enhanced Polar System (EPS) satellites. FAB-T terminals will also support the critical command and control (C2) of the Milstar, AEHF and EPS satellite constellations. In June 2014 the Air Force down-selected to Raytheon for production of FAB-T Command Post Terminals (CPT). Production contract options to produce CPT terminals were exercised after a successful Milestone C decision was approved September 1, 2015.

There are two P-5s contained in this document because there are two distinct Program Elements(PE) encompassed within this document. In FY15 FAB-T transferred to this current Line Item Number 836700. In FY16, FAB-T transferred from PE 0303601F to PE 0303001F. Therefore both PE 030601F and 0303001F have a P-5 document.

In the prior years through FY14, FAB-T was in Line Item Number 836780.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836700 / Family of Beyond Line-of-Sight Terminals

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0303001F **Other Related Program Elements:** 0303601F

Line Item MDAP/MAIS Code: 199 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Family of Advanced BLoS Terminals (FAB-T)		B	- / -	- / 52.278	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 52.278	- / -	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Family of Advanced BLoS Terminals (FAB-T)		B	- / -	- / -	- / -	- / -	- / 84.900	- / 137.178
P-40	Total Gross/Weapon System Cost			- / -	- / -	- / -	- / -	- / 84.900	- / 137.178

*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:
 Funding in FY17 will continue program office support and production activities including full rate production. In June 2014 the Air Force down-selected to Raytheon for production of FAB-T Command Post Terminals (CPT). Production contract options to produce CPT terminals were exercised after a Milestone C decision was approved September 1, 2015.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836700 / Family of Beyond Line-of-Sight Terminals	Item Number / Title [DODIC]: - / Family of Advanced BLoS Terminals (FAB-T)

ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	52.278	-	-	-	-	-	-	-	-	84.900	137.178
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	52.278	-	-	-	-	-	-	-	-	84.900	137.178
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	52.278	-	-	-	-	-	-	-	-	84.900	137.178

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	12.112	44.436	-	-	-	-	-	-	-	-	56.548
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - 0303601F MILSATCOM Space 0303001F FBLOST Cost																		
Recurring Cost																		
FAB-T Terminals (PE 33601F/33001F)	-	-	-	4.742	9	42.678	-	-	-	-	-	-	-	-	-	-	-	-
Technical Mission Analysis (WS)	-	-	-	-	-	4.000	-	-	-	-	-	-	-	-	-	-	-	-
Enterprise SE&I (WS)	-	-	-	-	-	0.600	-	-	-	-	-	-	-	-	-	-	-	-
GFE	-	-	-	-	-	0.300	-	-	-	-	-	-	-	-	-	-	-	-
PNVC Prime	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	-	-	-	47.578	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - 0303601F MILSATCOM Space 0303001F FBLOST Cost	-	-	-	-	-	47.578	-	-	-	-	-	-	-	-	-	-	-	-
Support - 0303001F FBLOST Cost																		
A&AS	-	-	-	-	-	2.300	-	-	-	-	-	-	-	-	-	-	-	-
Other Support	-	-	-	-	-	2.400	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support - 0303001F FBLOST Cost	-	-	-	-	-	4.700	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	52.278	-	-	-	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836700 / Family of Beyond Line-of-Sight Terminals	Item Number / Title [DODIC]: - / Family of Advanced BLoS Terminals (FAB-T)

ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:
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Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - 0303601F MILSATCOM Space 0303001F FBLOST Cost																		
Recurring Cost																		
FAB-T Terminals (PE 33601F/33001F)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.900	14.175	9	127.578
Technical Mission Analysis (WS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.000
Enterprise SE&I (WS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.600
GFE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.300
PNVC Prime	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.900	-	-	132.478
<i>Subtotal: Hardware - 0303601F MILSATCOM Space 0303001F FBLOST Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.900	-	-	132.478
Support - 0303001F FBLOST Cost																		
A&AS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.300
Other Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.400
<i>Subtotal: Support - 0303001F FBLOST Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.700
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.900	-	-	137.178

Remarks:

This P-Doc incorporates two Program Elements for FAB-T: PE 0303601F - Prior years through FY15; and PE 0303001F - FY16 and out.

To complete cost is for the Force Element Terminals (FET) which is a sub-program under FAB-T. Cost information is based solely on the Air Force Service Cost Position estimate for the FETs. Currently there is no approved acquisition strategy or funding for the FAB-T FETs

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
836720 / Space Based Ir Sensor Pgm Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604441F

Line Item MDAP/MAIS Code: 210 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	144.281	31.293	-	-	-	-	-	-	-	-	-	175.574
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	144.281	31.293	-	-	-	-	-	-	-	-	-	175.574
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	144.281	31.293	-	-	-	-	-	-	-	-	-	175.574

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Note 1: In the FY16 Consolidated Appropriations Act, selected space programs funded with Other Procurement, Air Force (OPAF) were transferred to Space Procurement, Air Force (SPAF) in FY16 and beyond. This exhibit will display values for FY15 and prior; funding for FY16 and beyond are displayed in SPAF. Total 3080/3021 procurement funding is \$380.320M.

This exhibit will display values in "Prior Years, PY, and Total (for 3080)" only; FY16 and beyond is displayed in the corresponding SPAF/3021 exhibits.

Note 2: The flyaway unit cost is not included on the P-40 exhibit because there are multiple P-5 Cost Analysis exhibits.

The Space-Based Infrared System (SBIRS) consolidates national and DOD infrared detection systems into a single overarching architecture that fulfills the nation's security needs in the areas of missile warning, missile defense, technical intelligence and battlespace awareness. SBIRS enables global, simultaneous surveillance, tracking and targeting of multiple targets in multiple areas of responsibility, and surveillance of infrared sources of operational, intelligence or national significance. SBIRS consists of Defense Support Program (DSP) satellites, satellites in Geosynchronous Earth Orbit (GEO), payloads hosted on Highly Elliptical Orbit (HEO) satellites, an integrated centralized Mission Control Station (MCS), full MCS backup, and relay and mobile ground stations. Development funding is in RDT&E AF Program Element 0604441F, SBIRS High. Production funding for SBIRS satellites is in MPAF and SPAF PE 0305915F.

1. SBIRS MOBILE AND FIXED SITE COMMUNICATIONS/ELECTRONIC Upgrades: This effort procures DSP and SBIRS assets to maintain the Data Processing Sub-System. Fixed site examples include, but are not limited to, legacy receiver, antenna drive system, Spacecraft Simulator RF, MCS display, Rapid Delog (instantaneous translation of computer data to a human-readable format), Sybase database obsolescence, communications and network routers, and switches and time server replacements. Mobile system examples include, but are not limited to, aging radio frequency communications equipment, aging antenna equipment, aging electrical equipment and cabling, and unsupported data processing subsystem components. Funding for this effort is in program element 0305915F.

2. SBIRS High-Altitude Electromagnetic Pulse (HEMP): This effort provides for upgrades, hardiness assurance and verification testing, to gain and maintain USSTRATCOM certification. AFSPC HEMP program supports the USSTRATCOM Integrated Nuclear Survivable and Endurable Report (INSER) to the Joint Staff, Secretary of Defense, and Congress. Funding was provided in FY15 only.

3. SBIRS SURVIVABLE ENDURABLE EVOLUTION (S2E2): The S2E2 effort recapitalizes the DSP Mobile Ground System (MGS) DSP Mobile Ground Terminals with SBIRS Mobile Ground Terminals (SMGT). The MGS is the only US Survivable and Endurable (S/E) Tactical Warning and Attack Assessment (TW/AA) system (S/E TW/AA). It is the critical Situation Monitoring element in three national-level architectures: Integrated TW/AA System, Chairman, Joint Chiefs of Staff (CJCS) Critical Nodes, and Nuclear Command and Control System (NCCS). USSTRATCOM needs AFSPCs global S/E TW/AA operational capabilities

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604441F
Line Item MDAP/MAIS Code: 210	Item MDAP/MAIS Code(s): N/A	
<p>to meet President of the United States, Joint Staff, Combatant Commander and Forward User (FU) requirements for continuous, persistent, and enduring TW/AA non-imaging infrared (NIR) for Missile Warning and static events, and Nuclear Detonation (NUDET) detection and reporting across all phases of military operations. The current MGS can only process DSP data for strategic Missile Warning and NUDET detection. This effort will address long-standing obsolescence/supportability concerns of the MGS and enable the MGS to process SBIRS and DSP satellite data. Training software, spares and integration of Universal Ground NDS Terminals (UGNTs) are included. The shelters will also be upgraded for increased protection from high altitude electromagnetic pulse (HEMP) per MIL-STD-188-125-2. Funding for this effort is in program element 0305915F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
836720 / Space Based Ir Sensor Pgm Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0604441F

Line Item MDAP/MAIS Code: 210 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	SBIRS Mobile System & Fixed Comm Electronics Upgrades		A	7 / 20.447	1 / 5.193	- / -	- / -	- / -	- / -
P-5	SBIRS Survivable Endurable Evolution (S2E2)	P-5a, P-21	A	2 / 123.834	1 / 26.100	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 144.281	- / 31.293	- / -	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	SBIRS Mobile System & Fixed Comm Electronics Upgrades		A	- / -	- / -	- / -	- / -	- / -	8 / 25.640
P-5	SBIRS Survivable Endurable Evolution (S2E2)	P-5a, P-21	A	- / -	- / -	- / -	- / -	- / -	3 / 149.934
P-40	Total Gross/Weapon System Cost			- / -	- / 175.574				

*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:
N/A

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6		P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space
		Item Number / Title [DODIC]: - / SBIRS Mobile System & Fixed Comm Electronics Upgrades

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	7	1	-	-	-	-	-	-	-	-	-	8
Gross/Weapon System Cost (\$ in Millions)	20.447	5.193	-	-	-	-	-	-	-	-	-	25.640
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	20.447	5.193	-	-	-	-	-	-	-	-	-	25.640
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	20.447	5.193	-	-	-	-	-	-	-	-	-	25.640

(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)	2.921	5.193	-	-	-	-	-	-	-	-	-	3.205

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - SBIRS Mobile System Cost																		
Recurring Cost																		
1. SBIRS Mobile Systems & Fixed Site Comm Electronics Upgrades	-	-	20.447	5.193	1	5.193	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	20.447	-	-	5.193	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - SBIRS Mobile System Cost</i>	-	-	20.447	-	-	5.193	-	-	-	-	-	-	-	-	-	-	-	-
Support - SBIRS Mobile System Cost																		
Other Support	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - SBIRS Mobile System Cost</i>	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	2.921	7	20.447	5.193	1	5.193	-	-	-	-	-	-	-	-	-	-	-	-

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - SBIRS Mobile System Cost																		
Recurring Cost																		

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space	Item Number / Title [DODIC]: - / SBIRS Mobile System & Fixed Comm Electronics Upgrades

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

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
1. SBIRS Mobile Systems & Fixed Site Comm Electronics Upgrades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.640	1	25.640
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.640
<i>Subtotal: Hardware - SBIRS Mobile System Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.640
Support - SBIRS Mobile System Cost																		
Other Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - SBIRS Mobile System Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.205	8	25.640

Remarks:

Note 1: Starting in FY16 funding has been re-categorized from Other Procurement (3080) to Space Procurement Air Force (SPAF/3021).

Note 2: FY15 funding provides for HEMP site upgrades and testing requirements at Survivable Mission Control Station (SMCS) at Buckley.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space	Item Number / Title [DODIC]: - / SBIRS Survivable Endurable Evolution (S2E2)

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	2	1	-	-	-	-	-	-	-	-	-	3
Gross/Weapon System Cost (\$ in Millions)	123.834	26.100	-	-	-	-	-	-	-	-	-	149.934
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	123.834	26.100	-	-	-	-	-	-	-	-	-	149.934
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	123.834	26.100	-	-	-	-	-	-	-	-	-	149.934

(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)	61.917	26.100	-	-	-	-	-	-	-	-	-	49.978

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - SBIRS Survivable Endurable Evolution (S2E2) Cost																		
Recurring Cost																		
2.5 S2E2 SMGT ^(†)	41.642	2	83.283	26.100	1	26.100	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	83.283	-	-	26.100	-	-	-	-	-	-	-	-	-	-	-	-
Non Recurring Cost																		
2.2 S2E2 Software Integration Facility (SIF)	5.200	1	5.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3 S2E2 System Test Environment (STE)	8.000	1	8.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4 S2E2 SMGT 1-3 DSP/GEO Stereo Capability Modification	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.6 S2E2 Integration	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Non Recurring Cost</i>	-	-	13.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - SBIRS Survivable Endurable Evolution (S2E2) Cost</i>	-	-	96.483	-	-	26.100	-	-	-	-	-	-	-	-	-	-	-	-
Software - SBIRS Survivable Endurable Evolution (S2E2) Cost																		
Non Recurring Cost																		
2.1 S2E2 Software	6.838	4	27.351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6						P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space						Item Number / Title [DODIC]: - / SBIRS Survivable Endurable Evolution (S2E2)					
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Non Recurring Cost</i>	-	-	27.351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Software - SBIRS Survivable Endurable Evolution (S2E2) Cost</i>	-	-	27.351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	61.917	2	123.834	26.100	1	26.100	-	-	-	-	-	-	-	-	-	-	-	-

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - SBIRS Survivable Endurable Evolution (S2E2) Cost																		
Recurring Cost																		
2.5 S2E2 SMGT ^(f)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.461	3	109.383
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109.383
Non Recurring Cost																		
2.2 S2E2 Software Integration Facility (SIF)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.200	1	5.200
2.3 S2E2 System Test Environment (STE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.000	1	8.000
2.4 S2E2 SMGT 1-3 DSP/GEO Stereo Capability Modification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.6 S2E2 Integration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.200
<i>Subtotal: Hardware - SBIRS Survivable Endurable Evolution (S2E2) Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	122.583
Software - SBIRS Survivable Endurable Evolution (S2E2) Cost																		
Non Recurring Cost																		
2.1 S2E2 Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.838	4	27.351
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.351
<i>Subtotal: Software - SBIRS Survivable Endurable Evolution (S2E2) Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.351

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space	Item Number / Title [DODIC]: - / SBIRS Survivable Endurable Evolution (S2E2)

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.978	3	149.934

Remarks:
 Note: Starting in FY16 funding has been re-categorized from Other Procurement (3080) to Space Procurement Air Force (SPAF/3021).

2. SBIRS Survivable Endurable Evolution (S2E2): SBIRS capable MGS require the interim deliverables over this period as described below.

S2E2 Software Non-Recurring:
 -FY11 - Provided non-recurring engineering for S2E2 System Test Environment (STE) design and integration.
 -FY12 - Provided non-recurring engineering for S2E2 HEMP shelters and software integration.
 -FY13 - Provided non-recurring engineering for track data relay processing, and S2E2 Maintenance Ops Support suite (MOSS).
 -FY14 - Provided non-recurring engineering for GEO capable S2E2 upgrade.
 -FY16- Provides training software for Standardized Space Trainer (SPAF funded)

S2E2 Hardware Non-Recurring:
 -FY11 - Modernized the current Software Integration Facility (SIF) to include development functionality for S2E2.
 -FY12 - Provided non-recurring engineering for S2E2 HEMP shelters and hardware integration.
 -FY13 - Provided non-recurring engineering for S2E2 Maintenance Ops Support Suite (MOSS). Modernized the existing Integrated Maintenance Facility (IMF) with a sustainable MOSS for S2E2 System predeployment, maintainer training, and limited operator training.
 -FY14 - Provided non-recurring engineering for GEO-Capable Parabolic Dish Sub-System (PDSS) antennas
 -FY16- Modifies SMGTs 1-3 to add PDSS antennas and other hardware for full Stereo DSP/GEO capability; completes UGNT integration (SPAF funded)

S2E2 Hardware Recurring:
 -FY12 - Procured 1 fully tested and sustainable Mono-DSP SMGT.
 -FY13 - Procured 1 fully tested and sustainable Mono-DSP SMGT.
 -FY14 - Procures 2 fully tested and sustainable PDSSs, and fully functional GEO-upgraded SMGTs 1&2.
 -FY15 - Procured 1 fully tested and sustainable GEO SMGT with two PDSSs. Procures the System Test Environment (STE) for high fidelity Development, Testing & Evaluation (DT&E) and future sustainment.
 -FY16 - Procures 2 fully capable Stereo DSP/GEO SMGTs with two PDSSs each, as well as 9 additional PDSSs needed to field full, simultaneous DSP and SBIRS downlink capability for FOC. (SPAF funded)

Total S2E2 Funding for FY11-16 = \$232.5M (FY16 SPAF funding = \$81.2M)
 Quantity = 5
 Gross Unit Cost = \$46.5M

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6			P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space				Item Number / Title [DODIC]: - / SBIRS Survivable Endurable Evolution (S2E2)					
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.5 S2E2 SMGT ^(†)		2015	Lockheed Martin Space Systems / Sunnyvale, CA	SS / CPIF	AFSPC	Nov 2014	Jan 2018	1	26.100	Y		Nov 2013

^(†) indicates the presence of a P-21

Remarks:

Note: Starting in FY16 funding has been re-categorized from Other Procurement (3080) to Space Procurement Air Force (SPAF/3021).

SBIRS Survivable Endurable Evolution (S2E2)

-FY14 purchased GEO-capability upgrades to SMGTs 1 & 2 (delivery Dec 2017)

-FY15 purchased GEO-capable SMGT 3 (delivery Jan 2018) and associated PDSS antennas

-FY16 purchases GEO-capable SMGTs 4&5 (delivery Jul 2020 and Sep 2020) and modifies SMGTs 1-3 to full Stereo DSP/GEO capability and associated PDSS antennas (SPAF funded)

FY16 Unit Cost Calculations (SPAF funded):

\$20M - Single SMGT cost based on contract option

\$2.5M - Additional Parabolic Dish Sub-System (PDSS) Antenna

\$2.5M - Spares

Total Unit Cost = \$25.0M

Gross Unit Cost Calculation:

S2E2 unit costs above are not representative of overall S2E2 costs due to interim deliverables. S2E2 unit costs are calculated as follows:

Total S2E2 Funding for FY11-16 = \$232.5M (FY16 SPAF funding = \$81.2M)

Quantity = 5

Gross Unit Cost = \$46.5M

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Exhibit P-21, Production Schedule: PB 2017 Air Force															Date: February 2016														
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6										P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space										Item Number / Title [DODIC]: - / SBIRS Survivable Endurable Evolution (S2E2)									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2015												Fiscal Year 2016												BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015												Calendar Year 2016												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P

2.5 S2E2 SMGT

Prior Years Deliveries: 2																														
1	2015	AF		1	-	1		A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

O C C #	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P
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Exhibit P-21, Production Schedule: PB 2017 Air Force															Date: February 2016														
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6										P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space										Item Number / Title [DODIC]: - / SBIRS Survivable Endurable Evolution (S2E2)									

Cost Elements <i>(Units in Each)</i>					Fiscal Year 2017														Fiscal Year 2018														BALANCE		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017														Calendar Year 2018														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
2.5 S2E2 SMGT																																			
Prior Years Deliveries: 2																																			
1		2015	AF	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6		P-1 Line Item Number / Title: 836720 / Space Based Ir Sensor Pgm Space
		Item Number / Title [DODIC]: - / SBIRS Survivable Endurable Evolution (S2E2)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Lockheed Martin Space Systems - Sunnyvale, CA	1	1	1	-	2	38	40	-	-	-	-

"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 all quantities are shown in thousands. 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: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836730 / Navstar GPS Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305164F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	2.065	-	-	-	-	-	-	-	-	-	2.065
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	2.065	-	-	-	-	-	-	-	-	-	2.065
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	2.065	-	-	-	-	-	-	-	-	-	2.065

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Navstar Global Positioning System (GPS) provides highly accurate time, three-dimensional position, and velocity information to an unlimited number of users anywhere on or above the surface of the earth, in any weather. GPS satisfies validated joint service requirements for worldwide, accurate, common grid navigation for military aircraft, ships, ground vehicles and personnel. The system is comprised of three segments: (1) satellites, (2) a ground control, and (3) user equipment. The satellites broadcast high-accuracy data using precisely synchronized signals that are received and processed by user equipment installed in military platforms. The ground control network updates the navigation messages broadcast from the satellites to provide system vectors to target location or navigational way points. Funds in this line support various GPS specific production efforts associated with the ground control and user equipment segments.

In the FY16 Consolidated Appropriations Act, selected space programs funded with Other Procurement, Air Force (OPAF) were transferred to Space Procurement, Air Force (SPAF) in FY16 and beyond. This exhibit will display values for FY15 and prior.

PE 0305164F NAVSTAR GPS (USER EQUIPMENT) (SPACE)

KEY DATA LOADING INSTALLATION FACILITY (KLIF)/GPS SECURITY DEVICE: The KLIF facilitates the programming of black key (cryptographic) algorithms into the Selective Availability Anti-Spoofing Module (SAASM) to provide accurate positioning solutions for GPS users using secure equipment.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836730 / Navstar GPS Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305164F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Global Positioning (Space)			- / -	- / 2.065	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 2.065	- / -	- / -	- / -	- / -

*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 0305164F NAVSTAR GPS (USER EQUIPMENT) (SPACE)

 KEY DATA LOADING INSTALLATION FACILITY (KLIF)/GPS SECURITY DEVICE: No FY17 OPAF funds requested. Funds in this line item transfer to Space Procurement, Air Force (SPAF) starting in FY16.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6 **P-1 Line Item Number / Title:** 836730 / Navstar GPS Space **Aggregated Items Title:** Global Positioning (Space)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Recurring Costs																				
KLIF/GPS Security Device	A		-	-	-	-	-	2.065	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Costs			-	-	-	-	-	2.065	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	2.065	-	-	-	-	-	-	-	-	-	-	-	

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
836750 / Nudet Detection Sys Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305913F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	4.656	-	-	-	-	-	-	-	-	-	4.656
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	4.656	-	-	-	-	-	-	-	-	-	4.656
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	4.656	-	-	-	-	-	-	-	-	-	4.656

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

In the FY16 Consolidated Appropriations Act, selected space programs funded with Other Procurement, Air Force (OPAF) were transferred to Space Procurement, Air Force (SPAF) in FY16 and beyond. This exhibit will display values for FY15 and prior.

The United States Nuclear Detonation (NUDET) Detection System (USNDS) provides a near real-time worldwide, highly survivable/endurable capability to detect, locate, and report any nuclear detonations in the atmosphere of the earth or in near space. The USNDS Operational Requirements Document (ORD), dated 21 Jan 2004, documents the requirements for space-based NUDET detection. Space-based NUDET detection is also mandated by Public Law 110-181, dated 28 Jan 2008, which directs the Secretary of Defense to maintain the capability for space-based nuclear detection at or above 2008 capability levels. USNDS supports NUDET detection requirements across five mission areas: Integrated Tactical Warning and Attack Assessment (ITW/AA), Nuclear Force Management (NFM), Space Control (SC), Treaty Monitoring (TM) and a classified mission.

The USNDS 6 program is jointly sponsored and funded by the Department of Defense (DoD), through the US Air Force (AF), and the Department of Energy (DOE), through the National Nuclear Security Administration (NNSA) and its Nuclear Detonation Detection (NA-22) office, respectively. NNSA/NA-22 supplies, at no cost to DoD, USNDS space sensors as Government Furnished Equipment (GFE) to the AF USNDS Program Office, which is responsible for all acquisition and systems engineering, integration and test (SEIT) activities on space vehicles (SVs), to include Global Positioning System (GPS) and additional hosts, and their supporting ground control segments. The AF directly funds the procurement of the USNDS 6 ground segment (described below).

DoD funds its contribution to the NDS program in PE 0305913F with RDT&E, OPAF, SPAF and O&M dollars. NDS payload integration onto GPS satellites is funded in the GPS Space & Control PE 0305165F for GPS IIF SVs and GPS III Space Segment PE 0305265F for GPS III SVs. NDS payload integration onto Geosynchronous Earth Orbit (GEO) satellites is funded by NNSA/NA-22.

USNDS consists of space sensors and complex ground segments. The space segment sensors, funded by DOE, consists of three nuclear detection sensor payloads: the Radiation Detection Capability (RADEC) payload for Defense Support Program (DSP) satellites, the Global Burst Detection (GBD) payload for Medium Earth Orbit (MEO) platforms (GPS satellites), and the Space Atmospheric Burst Reporting System (SABRS) payload for Geosynchronous Earth Orbit platforms (classified GEO hosts). Together, these sensors and associated communications capability provided by the host satellites comprise the global NUDET space segment detection capability for the USNDS. Space sensors communicate NUDET indications to the fixed ground segment (the RADEC Data Processor (RDP) and the Integrated Correlation and Display System (ICADS)) and the deployable mobile ground segment (survivable Ground NDS Terminals (GNTs), and the survivable/endurable Universal Ground NDS Terminals (UGNTs), when fielded). These ground systems perform data analysis and provide a decision support tool to the Air Force controllers concerning probability of NUDET occurrence. The ground segment provides ground receiving analysis and reporting

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 836750 / Nudet Detection Sys Space
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0305913F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>capabilities to national authorities, commands, and forward users as well as Department of State for Treaty Monitoring and Verification mission. The ground control segment is being modernized and continuously improved through an incremental evolution acquisition approach.</p> <p>The upgrade to the GNT is the survivable/endurable Universal Ground Nuclear Detonation (NUDET) Detection System (NDS) Terminal (UGNT) which is funded with AF RDT&E in this PE. The UGNT provides NUDET Detection Reports to end users through survivable and endurable USNDS communications via Milstar/Advanced Extremely High Frequency (AEHF) circuits. The GNT supports Integrated Tactical Warning and Attack Assessment (ITW/AA) and Nuclear Force Management (NFM) missions. The UGNT program modifies the baseline of the GNT program and deploys as an integral part of the Space Based Infrared System (SBIRS) Survivable / Endurable Evolution (S2E2) Mobile Ground System (SMGS) units also in support of ITW/AA and NFM. The UGNT, when integrated with the SMGS, will perform NUDET event processing with fused NDS data from GPS and DSP. SMGS capability refers to the result of the S2E2 upgrade program for the MGS mission processing capability, including the integration of UGNT. The intended end state of UGNT integration is delivery of enhanced missile warning and NUDET detection capabilities that meet survivable/endurable ITW/AA requirements directed by the President, SECDEF, Joint Staff, and USSTRATCOM delivering long-term, cost effective, multi-role, multi-mission space effects to the war fighter across the range of military operations.</p> <p>Funding for this effort is in PE 0305913F NUDET DETECTION SYS SPACE.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836750 / Nudet Detection Sys Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 0305913F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Nudet Detection Sys Space		A	- / -	- / 4.656	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 4.656	- / -	- / -	- / -	- / -

*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. INTEGRATED CORRELATION AND DISPLAY SYSTEM (ICADS) UPGRADES: No FY17 funding requested.
2. GROUND NUCLEAR DETONATION DETECTION TERMINALS UPGRADES: No FY17 funding requested. This line item transfers to Space Procurement, Air Force (SPAF) starting in FY16.
3. SENSOR CHECKOUT ACTIVITIES: No FY17 funding requested. This line item transfers to SPAF starting in FY16.
4. TECHNICAL SUPPORT: No FY17 funding requested. This line item transfers to SPAF starting in FY16.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836750 / Nudet Detection Sys Space	Item Number / Title [DODIC]: - / Nudet Detection Sys Space

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	4.656	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	4.656	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	4.656	-	-	-	-

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
Automated Data Processor (ADP)	-	-	-	0.300	1	0.300	-	-	-	-	-	-	-	-	-	-	-	-
ADP + Spares	-	-	-	1.654	2	3.307	-	-	-	-	-	-	-	-	-	-	-	-
ADP Testbed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Sensor Checkout Activities	-	-	-	0.500	1	0.500	-	-	-	-	-	-	-	-	-	-	-	-
4. Technical Support	-	-	-	0.549	1	0.549	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	-	-	-	4.656	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - Hardware End Item Cost	-	-	-	-	-	4.656	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	4.656	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:

(1) Quantity/unit cost data represents the average unit cost per system installation. Due to cost variances between local configurations, unit cost data will fluctuate between fiscal years.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
836760 / Af Satellite Control Network Space

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0305110F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	117.684	54.436	-	-	-	-	-	-	-	-	-	172.120 ^(a)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	117.684	54.436	-	-	-	-	-	-	-	-	-	172.120
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	117.684	54.436	-	-	-	-	-	-	-	-	-	172.120

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Air Force Satellite Control Network (AFSCN) is a satellite ground terminal network comprised of two communication nodes (Schriever AFB & Vandenberg AFB) and 15 antenna systems. The antennas are distributed around the world at seven locations -- Vandenberg Tracking Station (VTS), Diego Garcia Station (DGS), Guam Tracking Station (GTS), Hawaii Tracking Station (HTS), New Hampshire Tracking Station (NHS), Thule Tracking Station (TTS), and Telemetry and Commanding Station (TCS) at RAF Oakhanger, England -- to ensure global coverage for 140 satellites in various orbits. The AFSCN conducts an average of 450 satellite contacts per day supporting Positioning, Navigation and Timing (PNT); Intelligence, Surveillance and Reconnaissance (ISR); Missile Warning; Communications; Weather; and Research and Development (R&D) satellites for Department of Defense (DoD), Intelligence Community (IC), and National Aeronautics and Space Administration (NASA) operations. While most of the 450 satellite contacts/day are routine command and control activities, the AFSCN is also used for satellite emergencies (e.g. tumbling satellite) because its high power antennas are often the only earthbound assets that can contact a non-responsive satellite to re-establish command & control. During FY14 and FY15, the AFSCN supported 28 space vehicle emergencies resulting in the preservation of over \$8.5B worth of satellites. In addition to routine and emergency satellite operations C2, the AFSCN provides support to launch vehicle and early orbit operations, ensuring worldwide antennas receive telemetry and transmit commands to newly orbiting satellites to initiate early orbit checkout. Finally, the AFSCN provides Factory Compatibility Testing (FCT) to ensure satellites and launch vehicles can communicate via the AFSCN before the satellite is launched. These efforts include systems engineering and integration (SE&I) activities.

These funds are used to procure modernized equipment for the AFSCN to ensure the capability is available to support DoD, Intelligence community, and civil users.

Principal efforts include:

- 1) AFSCN Interim Supply Support: procures support services, peculiar and common support materials, and required re-procurement data for the Satellite Control Network Contract, and to transition to government supply support.
- 2) Remote Tracking Station (RTS) Block Change (RBC): The RBC Program was initiated in Dec 2001 to modernize the legacy system. The RBC program replaces legacy remote ground antenna systems that have reached end of life. To date, RBC systems have been installed at VTS, DGS, TCS, GTS, HTS, and NHS. TTS is projected to complete in 1Q FY16. In addition, the Air Force is upgrading the electronics in the remaining eight serviceable systems. This "hybrid" architecture couples the RBC electronics with existing antennas and normalizes electronics across the network. A prototype effort was implemented in FY12 to validate the approach and the first two hybrid articles were awarded in FY13 to upgrade legacy systems at GTS and HTS. A third article was awarded in FY14 to upgrade the legacy system at VTS. Funds in FY15 (DGS, TTS), FY16 (TCS, NHS) and FY17 (TCS, a station with three antenna systems) continue RBC Hybrid procurement for the remaining locations; completion is projected by FY20. Finally, the Enhanced

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 836760 / Af Satellite Control Network Space
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0305110F	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>High Power Amplifier (EHPA) spacecraft anomaly resolution system is scheduled for first-article delivery in 4Q 2016 at GTS. Future EHPA buys include VTS in FY16, NHS and DGS in FY18. Upon completion, EHPA will provide high-power anomaly resolution capability at four sites. The EHPA enables emergency satellite operations and is needed to replace obsolete parts.</p> <p>3) AIR FORCE SATELLITE CONTROL NETWORK RECAPITALIZATION: The Air Force will use various contract vehicles to address the highest priority upgrades. Obsolescence and sustainment "worst actors" are prioritized annually in order of criticality to the mission. The potential for failed satellite contacts drives priority. In FY17, funds are planned to be used for Cyber Defense solutions, Wide Area Network Interface (WANIF) implementation and Electronic Scheduling Dissemination 3.0 Standard Space Training environment for external users. Other FYDP projects include: Authentication, Authorization, Auditing/Host Based Security System (AAA/HBSS) implementation to external users, AFSCN test bed upgrades, continued cyber defense work, network automation, moving the AFSCN Test Bed (ATB) from a leased contractor facility to a government facility, Range/Network/Communication obsolescence upgrades, and Multi-band & Phased Array projects.</p> <p>Funding for this effort is contained in PE 0305110F. As of the FY16 PB submission, space programs procurement funding has been re-categorized from appropriation 3080, Other Procurement Air Force (OPAF) to appropriation 3021, Space Procurement Air Force (SPAF), in FY16 and beyond. This exhibit will display prior year and FY15 values. While FY16 and beyond will be displayed in the corresponding SPAF/3021 exhibits. Total 3080/3021 procurement funding is \$370.095M.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836760 / Af Satellite Control Network Space

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0305110F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AIR FORCE SATELLITE CONTROL NETWORK SPACE		B	- / -	- / 17.156	- / -	- / -	- / -	- / -
P-40a	AIR FORCE SATELLITE CONTROL NETWORK SPACE MODS			- / 117.684	- / 37.280	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 117.684	- / 54.436	- / -	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AIR FORCE SATELLITE CONTROL NETWORK SPACE		B	- / -	- / -	- / -	- / -	- / -	- / -
P-40a	AIR FORCE SATELLITE CONTROL NETWORK SPACE MODS			- / -	- / -	- / -	- / -	- / -	- / 154.964
P-40	Total Gross/Weapon System Cost			- / -	- / 172.120				

*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) AFSCN Interim Supply Support (P-5): FY17 funding provides peculiar and common support material, required re-procurement data, and interim supply support management. In addition, funds procure the most urgently needed capital equipment replacements for items that exceed the O&M dollar threshold. This equipment replaces items such as, but not limited to, high power amplifiers, processors, archival event recorders, and router switches, AFSCN Link Projection System (ALPS) equipment, legacy Electronic Scheduling Dissemination (ESD) 2.7 equipment and Diminishing Manufacturing Sources and Material Shortages (DMSMS) items which are at the top of the sustainers "worst actors" list and account for significant maintenance effort, down time, and lost or failed contacts.
 2) RBC and AFSCN Recapitalization Projects (P-3As): These efforts are critical to ensuring telemetry, tracking, and commanding are provided for over 140 satellites and that satellite emergencies requiring high-power antennas can be supported.
 FY17 funds continue Advisory & Assistance Services (A&AS) to procure other support for the system program office including, but not limited to cost estimating, contract reconciliation, and configuration management. These Advisory and Assistance Services and FFRDC efforts support the functions of government personnel in managing the production activities to upgrade the AFSCN system, and include FFRDC analyses to support installation, integration, and testing, as well as the installs and integration of equipment for the ongoing upgrades.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force													Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6							P-1 Line Item Number / Title: 836760 / Af Satellite Control Network Space						Item Number / Title [DODIC]: - / AIR FORCE SATELLITE CONTROL NETWORK SPACE					
ID Code (A=Service Ready, B=Not Service Ready) : B										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO		FY 2017 Total	
Procurement Quantity (Units in Each)				-		-			-			-			-		-	
Gross/Weapon System Cost (\$ in Millions)				-		17.156			-			-			-		-	
Less PY Advance Procurement (\$ in Millions)				-		-			-			-			-		-	
Net Procurement (P-1) (\$ in Millions)				-		17.156			-			-			-		-	
Plus CY Advance Procurement (\$ in Millions)				-		-			-			-			-		-	
Total Obligation Authority (\$ in Millions)				-		17.156			-			-			-		-	
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>																		
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.																		
Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Logistics - AFSCNS Cost																		
Recurring Cost																		
INTERIM SUPPLY SPT - Labor	-	-	-	-	-	2.534	-	-	-	-	-	-	-	-	-	-	-	-
INTERIM SUPPLY SPT -- Materiel	-	-	-	-	-	1.475	-	-	-	-	-	-	-	-	-	-	-	-
Technical Mission Analysis	-	-	-	-	-	4.149	-	-	-	-	-	-	-	-	-	-	-	-
AFSCN Enterprise Systems Engineering and Integration (SE&I)	-	-	-	-	-	1.866	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	10.024	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Logistics - AFSCNS Cost</i>	-	-	-	-	-	10.024	-	-	-	-	-	-	-	-	-	-	-	-
Support - Support End Item Cost																		
Advisory & Assistance Services (A&AS)	-	-	-	-	-	1.012	-	-	-	-	-	-	-	-	-	-	-	-
Other Support	-	-	-	-	-	0.923	-	-	-	-	-	-	-	-	-	-	-	-
FFRDC (PMA)	-	-	-	-	-	5.197	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	7.132	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	17.156	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6					P-1 Line Item Number / Title: 836760 / Af Satellite Control Network Space									Aggregated Modification Items Title: AIR FORCE SATELLITE CONTROL NETWORK SPACE MODS					

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
01-RBC / Remote Tracking Station Block Change (RBC)			-	-	117.684	-	-	34.149	-	-	-	-	-	-	-	-	-	-	-	
02-AFSCN / Air Force Satellite Control Network Recapitalization Projects			-	-	0.000	-	-	3.131	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	117.684	-	-	37.280	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
01-RBC / Remote Tracking Station Block Change (RBC)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	151.833	
02-AFSCN / Air Force Satellite Control Network Recapitalization Projects			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.131	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154.964	

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
01-RBC / Remote Tracking Station Block Change (RBC)	Air Force Satellite Control Network	Capability Improvement
02-AFSCN / Air Force Satellite Control Network Recapitalization Projects	Air Force Satellite Control Network	Capability Improvement

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
836770 / Spacelift Range System Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0305182F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	236.504	62.525	-	-	-	-	-	-	-	-	-	299.029 ^(a)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	236.504	62.525	-	-	-	-	-	-	-	-	-	299.029
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	236.504	62.525	-	-	-	-	-	-	-	-	-	299.029

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Spacelift Range System (SLRS), also known as the Launch and Test Range System (LTRS), provides public safety and assured access to space. SLRS operates at the Eastern Range (ER) at Patrick AFB/ Cape Canaveral AFS, FL and the Western Range (WR) at Vandenberg AFB, CA. SLRS provides tracking, telemetry, communications, flight safety, and other capabilities to support launch of national security space (NSS), civil and commercial space payloads, Intercontinental and Sea Launched ballistic missile and missile defense evaluations, and aeronautical and guided weapon tests. SLRS enables national security, civil, and commercial spacelift operations to be conducted safely; together with national security space launch capability, SLRS provides assured access to space for the nation. The ER and WR are part of the Department of Defense Major Range and Test Facility Base (MRTFB).

SLRS is comprised of twelve subsystems that together provide this capability to the ranges. The Range Safety and Command Destruct subsystems provide the capability to destroy an errant rocket, if necessary to protect public safety. These subsystems rely on the Telemetry, Radar, and Optics subsystems to provide tracking data. The Weather and Surveillance subsystems allow range operators and customers to determine if conditions are safe for launch. The Communications, Data Handling, and Timing & Sequencing subsystems ensure critical data is expeditiously routed from remote sensors (e.g., radars, optics, etc.) to range operators and customers. Finally, the Planning and Scheduling subsystem ensures all assets are available when needed for a launch or test operation.

The Air Force prioritizes procurement funds to ensure aging range equipment is modernized to support mission requirements. Sustainment trends are continuously analyzed and assessed across all twelve subsystems and procurement funds are used to modernize the most critical mission equipment.

- 1) SLRS Interim Supply Support (P5): Provides peculiar and common support material, required re-procurement data, and interim supply support management.
- 2) SLRS Support Services (P5): FY17 funds pay for FFRDC mission assurance activities to ensure all twelve subsystems are compatible with mission rules and do not pose a risk to safe and cost-effective satellite launches. Funds are also used for Systems Engineering and Integration (SE&I) to ensure baseline documentation and modernization activities remain synchronized with the sustainment baseline.
- 3) Range Command Destruct Modernization (RCDM) (P3a): Modernizes the Eastern and Western Range Command Destruct Systems. The Range Command Destruct modernization will provide the capability to use a new secure Command Destruct code, the Enhanced Flight Termination System (EFTS), mandated by the NSA for cyber security on both the Eastern and Western Ranges. The Eastern Range Command Destruct system will replace a sustainment "worst actor" that has been the cause of an expensive launch scrub as well as several near scrubs. The Western Range effort will replace the outdated command destruct codes with the new EFTS capability and meet the NSA mandate.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 836770 / Spacelift Range System Space
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0305182F	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>4) Modernization of Eastern Range Network (MEN) (P3a): Upgrades the communications subsystem on the Eastern Range from outdated Asynchronous Transfer Mode (ATM) technology to Internet Protocol (IP) version 4/6 (IPV4/IPV6). MEN resolves obsolescence issues facing the program starting in 2018, addresses high-priority sustainment issues, and provides improved cyber security for range operations. The contract was awarded as a small business set aside.</p> <p>5) Western Range Modernization of Network (WMN) (P3a): Upgrades the communications subsystem on the Western Range from Asynchronous Transfer Mode (ATM) technology to IPV6. WMN resolves remaining ATM obsolescence issues, numerous high-priority sustainment issues, and provides improved cyber security for range operations. The WMN contract will be awarded in FY16 as a small business set aside.</p> <p>6) SLRS Recapitalization Projects (P3a): The Air Force will use various contract vehicles (LTRS Integrated Support Contract (LISC), General Services Administration (GSA), Design Engineering Support Program (DESP) III, competitively-awarded contracts) to address the highest priority requirements. Obsolescence and sustainment "worst actors" in all twelve subsystems are prioritized annually in order of their criticality to the mission; priority is driven by likelihood of causing a launch delay/scrub.</p> <p>Funding for this exhibit is in PE 0305182F. As of the FY16 PB submission, space programs procurement funding has been re-categorized from appropriation 3080, Other Procurement Air Force (OPAF) to appropriation 3021, Space Procurement Air Force (SPAF), in FY16 and beyond. This exhibit will display prior year and FY15 values. While FY16 and beyond will be displayed in the corresponding SPAF/3021 exhibits. Total 3080/3021 procurement funding is \$779.550M.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
836770 / Spacelift Range System Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0305182F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Spacelift Range System Space		A	- / 78.381	- / 41.887	- / -	- / -	- / -	- / -
P-40a	Spacelift Range System Space			- / 158.123	- / 20.637	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 236.504	- / 62.525	- / -	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Spacelift Range System Space		A	- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Spacelift Range System Space			- / -	- / -	- / -	- / -	- / -	- / 178.760
P-40	Total Gross/Weapon System Cost			- / -	- / 299.029				

*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:

Spacelift Range System Space (P-5): For SLRS Interim Supply Support, FY17 funds will pay for interim supply support, to include supplies and associated interim supply support management. In addition, funds procure the most urgently needed capital equipment replacements for items that exceed the O&M dollar threshold. For SLRS SUPPORT SERVICES, FY17 funds pay for FFRDC mission assurance activities to ensure all twelve subsystems are compatible with mission rules and do not pose a risk to safe and cost-effective satellite launches. Funds are also used for SE&I to ensure baseline documentation and modernization activities remain synchronized with the sustainment baseline.

MEN, WMN, RCDM, and Recapitalization Projects (P-3As): These modifications are required to enable the safe conduct of national security, civil, and commercial launches at the Eastern and Western Ranges. Further, they ensure continued support to test range customers.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836770 / Spacelift Range System Space	Item Number / Title [DODIC]: - / Spacelift Range System Space
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ID Code (A=Service Ready, B=Not Service Ready) : A **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	78.381	41.887	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	78.381	41.887	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	78.381	41.887	-	-	-	-

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Logistics - Logistics End Item Cost																		
Recurring Cost																		
INTERIM SUPPLY SUPPORT MATERIAL (PARTS/SUPPLIES)	-	-	4.652	-	-	2.618	-	-	-	-	-	-	-	-	-	-	-	-
INTERIM SUPPLY SUPPORT SERVICES/LABOR	-	-	2.489	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLRS ENTERPRISE SYSTEMS ENGINEERING AND INTEGRATION	-	-	35.646	-	-	21.967	-	-	-	-	-	-	-	-	-	-	-	-
TECHNICAL MISSION ANALYSIS	-	-	7.818	-	-	2.390	-	-	-	-	-	-	-	-	-	-	-	-
TEST & EVALUATION (WS)	-	-	4.400	-	-	3.605	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	<i>55.005</i>	-	-	<i>30.580</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Logistics - Logistics End Item Cost</i>	-	-	<i>55.005</i>	-	-	<i>30.580</i>	-	-	-	-	-	-	-	-	-	-	-	-
Support - Support End Item Cost																		
FFRDC	-	-	18.612	-	-	9.567	-	-	-	-	-	-	-	-	-	-	-	-
ADVISORY AND ASSISTANCE SERVICES (A&AS)	-	-	2.926	-	-	1.186	-	-	-	-	-	-	-	-	-	-	-	-
OTHER SUPPORT	-	-	1.838	-	-	0.554	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6						P-1 Line Item Number / Title: 836770 / Spacelift Range System Space						Item Number / Title [DODIC]: - / Spacelift Range System Space					
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support - Support End Item Cost</i>	-	-	23.376	-	-	11.307	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	78.381	-	-	41.887	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:

- Unit quantities and costs vary widely for multiple types and configurations of equipment being procured under modernization and sustainment project cost elements each fiscal year.

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6					P-1 Line Item Number / Title: 836770 / Spacelift Range System Space									Aggregated Modification Items Title: Spacelift Range System Space					

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
01-MEN / Modernization of Eastern Range Network (MEN)			-	-	45.585	-	-	2.444	-	-	-	-	-	-	-	-	-	-	-	
02-WMN / Western Range Modernization of Network (WMN)			-	-	30.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
03-RCDM / Range Command Destruct Modernization (RCDM)			-	-	35.567	-	-	15.581	-	-	-	-	-	-	-	-	-	-	-	
04-SLRS / Spacelift Range System Recapitalization Projects			-	-	46.971	-	-	2.612	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	158.123	-	-	20.637	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
01-MEN / Modernization of Eastern Range Network (MEN)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48.029	
02-WMN / Western Range Modernization of Network (WMN)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.000	
03-RCDM / Range Command Destruct Modernization (RCDM)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51.148	
04-SLRS / Spacelift Range System Recapitalization Projects			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.583	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	178.760	

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
01-MEN / Modernization of Eastern Range Network (MEN)	Spacelift Range System Space	Capability Improvement
02-WMN / Western Range Modernization of Network (WMN)	Spacelift Range System Space	Capability Improvement
03-RCDM / Range Command Destruct Modernization (RCDM)	Spacelift Range System Space	Reliability & Maintainability
04-SLRS / Spacelift Range System Recapitalization Projects	Spacelift Range System Space	Reliability & Maintainability

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836770 / Spacelift Range System Space	Aggregated Modification Items Title: Spacelift Range System Space

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
 836780 / Milsatcom Space

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: 199 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	637.722	65.002	-	-	-	-	-	-	-	-	-	702.724
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	637.722	65.002	-	-	-	-	-	-	-	-	-	702.724
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	637.722	65.002	-	-	-	-	-	-	-	-	-	702.724

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

PE 0303601F MILSATCOM TERMINALS

MILITARY SATELLITE COMMUNICATIONS (MILSATCOM) joint-service systems collectively provide a broad range of satellite communication capabilities, including secure, jam-resistant, 24-hour worldwide communications to meet essential strategic, tactical and general-purpose operational requirements. MILSATCOM terminals support communications requirements for the President and Secretary of Defense, unified and specified combatant commanders, uniformed services and defense agencies. Procurement funding is in program element (PE) 0303601F, MILSATCOM Terminals, except where otherwise noted. There are also research and development efforts related to some of these efforts, and that RDT&E AF funding is also in PE 0303601F.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:**
836780 / Milsatcom Space
Equip / BSA 6: Space 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: 199 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	MILSATCOM Terminals	P-5a, P-21	A	- / 637.461	- / 64.737	- / -	- / -	- / -	- / -
P-40a	Satellite Communications (SATCOM) O&M			- / 0.261	- / 0.265	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 637.722	- / 65.002	- / -	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	MILSATCOM Terminals	P-5a, P-21	A	- / -	- / -	- / -	- / -	- / -	- / 702.198
P-40a	Satellite Communications (SATCOM) O&M			- / -	- / -	- / -	- / -	- / -	- / 0.526
P-40	Total Gross/Weapon System Cost			- / -	- / 702.724				

*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 0303601F MILSATCOM TERMINALS

SECURE MOBILE ANTI-JAM RELIABLE TACTICAL TERMINALS (SMART-T) UPGRADE: SMART-T is a ground fixed and mobile extremely high frequency (EHF) terminal providing survivable, jam-resistant, worldwide, continuous secure communications to tactical war-fighters. Currently, SMART-T terminals inter-operate with the Milstar satellite constellation in low data rate (LDR) mode at 2.4 Kbps and medium data rate (MDR) mode at 1.5 Mbps. The Air Force leveraged an Army contract to upgrade and repair the SMART-T Terminals to be compatible with the AEHF satellite system. No FY17 funding requested.

AIR FORCE WIDEBAND ENTERPRISE TERMINALS (AFWET): AFWET terminals form the Satellite Communications (SATCOM) backbone of the DoD Information Network (DoDIN), operating over Wideband Global SATCOM (WGS), Defense Satellite Communications System, commercial and Allied satellites. These Enterprise terminals support the command and control requirements of Combatant Commanders worldwide and the communication requirements of the President, Secretary of Defense, Department of State (DoS), US strategic and tactical forces, and the North Atlantic Treaty Organization. The Air Force is responsible for sustaining facilities and terminal equipment at Air Force operated and maintained Enterprise ground terminal locations. AFWET upgrades include modifications and life extensions to: baseband equipment, interconnect facilities, radomes, supporting facilities and antennas. AFWET funding includes: Advisory and Assistance Services (A&AS), Product Support, and other related activities worldwide to ensure operational viability in accordance with the Joint Staff, DoD Chief Information Officer and Defense Information Systems Agency (DISA) directives. In FY17, the Air Force will procure and install major modernization kits as Government-Off-The-Shelf (via the Army's Modernization of Enterprise Terminals program), conduct numerous targeted sustainment actions to extend the life of the system, sustain operational suitability, safety and effectiveness, and maintain high interoperability with other DoS, Army, Navy, and Air Force strategic and tactical terminals. Procurement includes ground terminal modernization, baseband equipment, installation and integration, site preparation, and facilities. Unit cost for MET procurement changes substantially depending on specific versions purchased (small, fixed, transportable, protected, etc). Installation, integration and site preparation costs also change substantially based on location. Life extension and modernization efforts also provide incidental increases in capability, allowing for full utilization of WGS capabilities, compliance with directives on the usage of Internet Protocol, adherence to Unified Capabilities Requirements, compliance with National Security Agency directives on cryptographic equipment, and more efficient and effective usage of satellite resources for jam-resistant and anti-scintillation wideband links.

GLOBAL BROADCAST SERVICE (GBS): This AF-led joint program implements a worldwide high-capacity satellite broadcast information system to provide a continuous, one-way, high-speed, high-volume flow of classified and unclassified data and imagery to garrisoned, deployed or moving forces. GBS provides DoD some relief from reliance on leased commercial satellite communications. GBS Receive Suites provide lower-echelon AF users with efficient high-data-rate in-theater to many distributed information sources via satellite-hosted GBS packages. In addition to Prime Mission Equipment, FY17 funds will fund integration and installation, technical manual updates, spares, systems engineering, test, training, A&AS, upgrades, and other related activities to provide a non-transmission security (TRANSEC) solution until a TRANSEC modem is available.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 836780 / Milsatcom Space
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: 199	Item MDAP/MAIS Code(s): N/A	

- a. GBS RECEIVE SUITES: The receive suites link users to information sources via GBS, offering worldwide service.
 - b. JOINT INTERNET PROTOCOL MODEM (JIPM): On 13 Nov 14, DoD Chief Information Officer (CIO) re-directed the JIPM acquisition strategy to a commercial-off-the-shelf (COTS) solution.
 - c. TRANSEC MODEM: GBS working with DoD to identify TRANSEC Modem for GBS. Interim non-TRANSEC solution has been identified. Modification is being processed. Government testing will begin 4th Qtr 2015 and concludes 4th Qtr 2016. Following an operational trial period, operational acceptance will occur 1st Qtr 2017.
 - d. GBS PORTABLE RECEIVE SUITES: These are Rucksack and Suitcase variants of the GBS terminals required by Special Operations Forces in forward operating areas.
 - e. GBS BROADCAST MANAGER: The Satellite Broadcast Manager (SBM) systems at two of DISA's Defense Enterprise Computing Centers (DECC) that provide the GBS broadcast to the GBS Receive Suites worldwide.
- GROUND MULTIBAND TERMINAL (GMT): GMT terminals support war-fighter tactical communications requirements utilizing WGS, DSCS and commercial satellite systems. GMT provides flexible, lightweight, modular, scalable, and integrated tactical quad-band SATCOM terminals which operate in X, C, Ku and military Ka frequency bands. The GMT replaces ground mobile force terminals that are reaching end of life. No FY17 funding requested.
- MILSATCOM SUSTAINMENT MODIFICATIONS: Provides minor modifications for MILSATCOM systems currently in sustainment and those currently fielded. Funding FY17 continues sustainment for MPE 0303605F SATELLITE COMMUNICATIONS (SATCOMS).
- FAMILY OF ADVANCED BEYOND LINE OF SIGHT TERMINALS (FAB-T): In FY16 FAB-T transferred to PE: 0303001F.
- HIGH DATA RATE-RADIO FREQUENCY (HDR-RF): The ground terminal program will provide the high data rate SATCOM needed to support the Intelligence, Surveillance, and Reconnaissance (ISR) community with high bandwidth and high throughput capability. HDR-RF ground terminals will be used for command & control ISR, and will support the full spectrum of operation from humanitarian support / disaster relief to a major theater war. HDR-RF terminals will be interoperable with WGS satellites to support air intelligence, surveillance, and reconnaissance data rates up to 274 Mbps. HDR-RF ground terminals will provide quad-band C-, X-, Ku-, and Ka Band SATCOM. HDR-RF ground terminals will be interoperable with legacy tactical terminals and operate worldwide with existing military and commercial spacecraft. The user of HDR-RF ground terminals is to support ISR missions. No FY17 funding requested.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836780 / Milsatcom Space	Item Number / Title [DODIC]: - / MILSATCOM Terminals

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

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	637.461	64.737	-	-	-	-	-	-	-	-	-	702.198
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	637.461	64.737	-	-	-	-	-	-	-	-	-	702.198
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	637.461	64.737	-	-	-	-	-	-	-	-	-	702.198

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - 0303601F Cost																		
Recurring Cost																		
AFWET - MODERNIZATION OF ENTERPRISE TERMINALS	6.651	15	99.759	7.972	4	31.888	-	-	-	-	-	-	-	-	-	-	-	-
AFWET - UPGRADES	-	-	87.198	-	-	2.163	-	-	-	-	-	-	-	-	-	-	-	-
GBS - RECEIVE SUITES	0.250	249	62.275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Portable Receive Suites (OCO) ^(f)	0.097	59	5.695	0.215	91	19.547	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Joint IP Modem (PB)	0.011	240	2.575	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Portable Receive Suites	0.314	7	2.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMT - Quantity: Ground Multiband Terminals	0.000	315	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMT - TERMINALS	1.607	21	33.744	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMT - ANTENNAS	0.713	111	79.142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMT - JIPM Modems	0.037	63	2.331	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMT - JIPM Modules	0.397	120	47.581	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6						P-1 Line Item Number / Title: 836780 / Milsatcom Space						Item Number / Title [DODIC]: - / MILSATCOM Terminals					
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
SMART-T - Secure Mobile Anti-jam Reliable Tactical Terminal	-	-	32.902	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FAB-T - TERMINALS ^(†)	5.484	10	54.840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HDR-RF - Quantity	0.000	11	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HDR-RF - GROUND TERMINALS	2.449	3	7.347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HDR-RF - Q-LAA ANTENNAS	0.665	8	5.320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Enterprise Systems Engineering & Integration	-	-	20.454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Technical Mission Analysis	-	-	11.079	-	-	0.329	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Test Support	-	-	1.087	-	-	4.100	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Receive Suites, Integration and Installation	-	-	21.085	-	-	1.383	-	-	-	-	-	-	-	-	-	-	-	-
AFWET - Product Services	-	-	2.862	-	-	1.675	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	<i>579.476</i>	-	-	<i>61.085</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - 0303601F Cost</i>	-	-	<i>579.476</i>	-	-	<i>61.085</i>	-	-	-	-	-	-	-	-	-	-	-	-
Software - 0303601F Cost																		
Recurring Cost																		
GMT - Technical Data Package	-	-	2.300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	<i>2.300</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Software - 0303601F Cost</i>	-	-	<i>2.300</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - 0303601F Cost																		
AFWET - Advisory and Assistance Services (A&AS)	-	-	4.239	-	-	0.591	-	-	-	-	-	-	-	-	-	-	-	-
GBS - Advisory and Assistance Services (A&AS)	-	-	7.640	-	-	1.098	-	-	-	-	-	-	-	-	-	-	-	-
GBS - OTHER SUPPORT	-	-	1.883	-	-	0.475	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6						P-1 Line Item Number / Title: 836780 / Milsatcom Space						Item Number / Title [DODIC]: - / MILSATCOM Terminals					
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
GBS - TRAINING - GBS Rucksacks	-	-	0.275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMT - ENTERPRISE SYSTEMS ENGINEERING AND INTEGRATION	-	-	4.340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMT - Advisory and Assistance Services (A&AS)	-	-	9.651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GBS Transmit Strings - ENTERPRISE SYSTEMS ENGINEERING AND INTEGRATION	-	-	0.949	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GBS Transmit Strings - TELEPORT INTEGRATION	-	-	2.375	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HDR-RF - ENTERPRISE SYSTEMS ENGINEERING AND INTEGRATION	-	-	4.071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HDR-RF - Advisory and Assistance Services (A&AS)	-	-	4.409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FAB-T System Engineering	-	-	3.043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FAB-T Program Management Administration	-	-	5.673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FAB-T Production Planning	-	-	4.730	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AFWET - OTHER SUPPORT	-	-	2.407	-	-	1.488	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - 0303601F Cost</i>	-	-	55.685	-	-	3.652	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	637.461	-	-	64.737	-	-	-	-	-	-	-	-	-	-	-	-
Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - 0303601F Cost																		
Recurring Cost																		

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6 **P-1 Line Item Number / Title:** 836780 / Milsatcom Space **Item Number / Title [DODIC]:** - / MILSATCOM Terminals

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

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AFWET - MODERNIZATION OF ENTERPRISE TERMINALS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.929	19	131.647
AFWET - UPGRADES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89.361
GBS - RECEIVE SUITES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.250	249	62.275
GBS - Portable Receive Suites (OCO) ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.168	150	25.242
GBS - Joint IP Modem (PB)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.011	240	2.575
GBS - Portable Receive Suites	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.314	7	2.200
GMT - Quantity: Ground Multiband Terminals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	315	-
GMT - TERMINALS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.607	21	33.744
GMT - ANTENNAS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.713	111	79.142
GMT - JIPM Modems	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.037	63	2.331
GMT - JIPM Modules	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.397	120	47.581
SMART-T - Secure Mobile Anti-jam Reliable Tactical Terminal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.902
FAB-T - TERMINALS ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.484	10	54.840
HDR-RF - Quantity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-
HDR-RF - GROUND TERMINALS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.449	3	7.347
HDR-RF - Q-LAA ANTENNAS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.665	8	5.320
GBS - Enterprise Systems Engineering & Integration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.454
GBS - Technical Mission Analysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.408
GBS - Test Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.187
GBS - Receive Suites, Integration and Installation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.468

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Exhibit P-5, Cost Analysis: PB 2017 Air Force													Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6						P-1 Line Item Number / Title: 836780 / Milsatcom Space						Item Number / Title [DODIC]: - / MILSATCOM Terminals						
ID Code (A=Service Ready, B=Not Service Ready) : A										MDAP/MAIS Code:								
Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AFWET - Product Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.537
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	640.561
<i>Subtotal: Hardware - 0303601F Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	640.561
Software - 0303601F Cost																		
Recurring Cost																		
GMT - Technical Data Package	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.300
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.300
<i>Subtotal: Software - 0303601F Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.300
Support - 0303601F Cost																		
AFWET - Advisory and Assistance Services (A&AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.830
GBS - Advisory and Assistance Services (A&AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.738
GBS - OTHER SUPPORT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.358
GBS - TRAINING - GBS Rucksacks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.275
GMT - ENTERPRISE SYSTEMS ENGINEERING AND INTEGRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.340
GMT - Advisory and Assistance Services (A&AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.651
GBS Transmit Strings - ENTERPRISE SYSTEMS ENGINEERING AND INTEGRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.949
GBS Transmit Strings - TELEPORT INTEGRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.375
HDR-RF - ENTERPRISE SYSTEMS ENGINEERING AND INTEGRATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.071
HDR-RF - Advisory and Assistance Services (A&AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.409

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836780 / Milsatcom Space	Item Number / Title [DODIC]: - / MILSATCOM Terminals
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ID Code (A=Service Ready, B=Not Service Ready) : A **MDAP/MAIS Code:**

Cost Elements	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
FAB-T System Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.043
FAB-T Program Management Administration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.673
FAB-T Production Planning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.730
AFWET - OTHER SUPPORT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.895
<i>Subtotal: Support - 0303601F Cost</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59.337
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	702.198

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836780 / Milsatcom Space	Item Number / Title [DODIC]: - / MILSATCOM Terminals
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
GBS - Portable Receive Suites (OCO) ^(t)		2014	AQYR Technologies, Inc / Nashua, NH	C / IDIQ	AFLCMC Hanscom AFB	Sep 2015	Mar 2016	59	0.097	Y		Mar 2015
GBS - Portable Receive Suites (OCO) ^(t)		2015	AQYR Technologies, Inc / Nashua, NH	C / IDIQ	AFLCMC Hanscom AFB	Sep 2015	Aug 2016	91	0.215	Y		
FAB-T - TERMINALS ^(t)		2014	Raytheon Corporation / Marlborough, MA	C / FFP	AFLCMC Hanscom AFB	Sep 2015	Aug 2016	10	5.484	Y		Mar 2013

^(t) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6 **P-1 Line Item Number / Title:** 836780 / Milsatcom Space **Item Number / Title [DODIC]:** - / MILSATCOM Terminals

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2017												Fiscal Year 2018												BALANCE	
OCO #	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017												Calendar Year 2018												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP
GBS - Portable Receive Suites (OCO)																															
	1	2014	AF	59	59	-																							-		
	1	2015	AF	91	11	80	10	10	10	10	10	10	10																-		
FAB-T - TERMINALS																															
	2	2014	AF	10	2	8	2	2	2	2																			-		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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Exhibit P-21, Production Schedule: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836780 / Milsatcom Space	Item Number / Title [DODIC]: - / MILSATCOM Terminals
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2017	1-8-5 For 2017	MAX For 2017	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	AQYR Technologies, Inc - Nashua, NH	1	10	10	11	12	11	23	-	-	-	-
2	Raytheon Corporation - Marlborough, MA	-	-	-	-	-	-	-	-	-	-	-

"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 all quantities are shown in thousands. 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: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6					P-1 Line Item Number / Title: 836780 / Milsatcom Space										Aggregated Items Title: Satellite Communications (SATCOM) O&M				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CCS-C	A		-	-	0.261	-	-	0.265	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	0.261	-	-	0.265	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	0.261	-	-	0.265	-	-	-	-	-	-	-	-	-	-	-	-
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CCS-C	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.526
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.526
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.526

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836790 / Space Mods Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0305165F, 0305940F **Other Related Program Elements:** 0305614F, 0305940F

Line Item MDAP/MAIS Code: 166 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	14.677	31.706	-	-	-	-	-	-	-	-	-	46.383
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	14.677	31.706	-	-	-	-	-	-	-	-	-	46.383
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	14.677	31.706	-	-	-	-	-	-	-	-	-	46.383

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Space Mods Space enables the development of advanced Command and Control (C2) Battle Management, Intelligence Surveillance and Reconnaissance (ISR), and Command, Control, Communications, Computers, and Intelligence (C4I) systems to conduct effective predictive battle space awareness, facilitate precision attack, and compress the sensor-to-shooter kill chain. Permanent modifications are configuration changes to in-service systems and equipment that correct materiel or other deficiencies, or that add or delete capability. Safety modifications correct deficiencies that produce hazards to personnel, systems, or equipment. This budget line covers both new and on-going modification efforts for space equipment and systems. Modification installation funding is budgeted in the year the installation occurs.

PE 0305160F DEF METEOROLOGICAL SAT PROG (SPACE)

The DEFENSE METEOROLOGICAL SATELLITE PROGRAM (DMSP) is a fully operational program supporting a broad range of national security users who require timely and accurate global weather information. DMSP is the only DoD assured source of global weather data providing visible and infrared cloud cover imagery (1/3 nautical miles (nm) constant resolution) and other meteorological, oceanographic, land surface, and space environmental data. DMSP satellites are flown in sun-synchronous, 450nm polar-orbits to meet mission requirements (sun-synchronous means the satellites cross the equator at the same local sun time on each of their 14 orbits/day).

Key elements of the DMSP constellation command and control (C2) ground system have not been re-capitalized since the equipment was transferred to the National Oceanic and Atmospheric Administration Office of Satellite Operations in 1998. Critical C2 component spares have been depleted and parts cannibalization is no longer sustainable. Therefore, DMSP re-established a 3080 funding line beginning in FY15 to enable continued C2 ground segment sustainment through a selective re-capitalization effort. C2 subsystems to be addressed include but are not limited to the Telemetry and Commanding System, flight configuration management, Mission Planning and Scheduling System, and communication tracking station interface units. This selective re-capitalization effort is intended to ensure the DMSP C2 system remains viable through the planned DMSP mission fly-out no later than 2027.

PE 0305165F NAVSTAR GPS (SPACE AND CONTROL SEGMENTS)

NAVSTAR GLOBAL POSITIONING SYSTEM (GPS) provides highly accurate time and three dimensional position and velocity information to an unlimited number of users anywhere on or above the surface of the earth, in any weather. This system supplies highly accurate position, velocity, timing, and Nuclear Detonation (NUDET) Detection System (NDS) information to properly equipped air, land, sea, and space-based users worldwide. The GPS system consists of three segments: space, control, and user equipment. The Operational Control System (OCS) is part of the control segment and requires modifications to replace high failure rate parts and preclude system operational degradation. Without these mods, aging and obsolete equipment will excessively degrade, ultimately resulting in system failure. System failure

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 836790 / Space Mods Space
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0305165F, 0305940F	Other Related Program Elements: 0305614F, 0305940F
Line Item MDAP/MAIS Code: 166	Item MDAP/MAIS Code(s): N/A	
<p>or even partial system failure will cause a loss of operational availability and the transmission of inaccurate navigation data to worldwide users, resulting in potential loss of life and/or operational equipment, including multi-million dollar satellites. OCS is required to operate until the Next Generation Operational Control System (OCX) transitions to operations.</p> <p>PE 0305614F JSPOC MISSION SYSTEM</p> <p>JOINT SPACE OPERATIONS CENTER (JSpOC) Mission System (JMS) provides integrated space situational awareness information and C2 of space forces for the Joint Functional Component Commander for Space (JFCC-SPACE). It will allow JFCC-SPACE to plan, direct, coordinate, and control operations of assigned forces. The JMS provides a net-centric, Services Oriented Architecture (SOA) along with space mission applications to meet the needs above. It implements a Space User Defined Operational Picture (UDOP) to provide the capability to create, visualize, and share decision-relevant views of space operational environment at all echelons.</p> <p>PE 0305912F SLBM RADAR WARNING SYSTEM</p> <p>SEA-LAUNCHED BALLISTIC MISSILE (SLBM) DETECTION AND WARNING SYSTEM: The primary mission of the 474N SLBM Detection and Warning System is to provide United States Strategic Command (USSTRATCOM) with credible Integrated Tactical Warning/Attack Assessment (ITW/AA) data on all SLBMs penetrating the coverage area. This data includes an estimation of launch and predicted impact (L&PI) locations and times. The secondary mission is to provide the Cheyenne Mountain Air Force Station, CO (CMAFS) and other users with ITW/AA data on Intercontinental Ballistic Missiles (ICBMs) penetrating the coverage area. Additionally, Perimeter Acquisition Radar Attack Characterization System (PARCS) and PAVE Phased Array Warning Systems (PAVE PAWS) support the Space Situational Awareness (SSA) mission by providing near earth satellite surveillance, tracking and identification as required by the Space Control Center, Alternate Space Control Center, and the Joint Intelligence Center. The sensors have an operational availability requirement of 98 percent. The 474N SLBM Detection and Warning System currently consists of: a) the AN/FPQ-16 PARCS and b) the AN/FPS-123 PAVE PAWS System (Phased Array Radars for SLBM Detection and Warning System).</p> <p>PE 0305940F SPACE SITUATION AWARENESS OPERATIONS</p> <p>GROUND-BASED ELECTRO OPTICAL DEEP SPACE SURVEILLANCE (GEODSS) SERVICE LIFE EXTENSION PROGRAM (SLEP) Phase II: The GEODSS SLEP Phase II will replace aging unsupportable mission critical sub-systems with modern sustainable components, allowing continued mission operations through 2025. GEODSS is a three-site optical telescope system dedicated to the Space Surveillance Network (SSN). The GEODSS sites, located in Socorro, New Mexico; Maui, Hawaii; and Diego Garcia (British Indian Ocean Territories), provide time critical deep-space tracking information for the Joint Space Operations Center (JSpOC). The GEODSS SLEP Phase II will modernize the Sensor Controller, Data Processing, and other unsustainable subsystems as required for all sites. The program will replace the obsolete, diminishing supportable components of the GEODSS Sensor Controller Group (SCG) with sustainable hardware/software technology.</p> <p>NET-CENTRIC SENSORS AND DATA SOURCES (N-CSDS): The N-CSDS program, through net-centric exposure, provides data from traditional Space Surveillance Network (SSN) sensors and non-traditional space situational awareness sensors, and data sources. It enables legacy sensors and data sources to distribute information net-centrally while also providing additional data. RDT&E funding for this effort is in PE 0604425F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836790 / Space Mods Space

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0305165F, 0305940F **Other Related Program Elements:** 0305614F, 0305940F

Line Item MDAP/MAIS Code: 166 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Defense Meteorological Satellite Program (SPACE)			- / 0.000	- / 2.165	- / -	- / -	- / -	- / -
P-40a	NAVSTAR Global Positioning System (Space and Control Segments)			- / 9.774	- / 12.656	- / -	- / -	- / -	- / -
P-40a	JSPOC Mission System			- / 0.867	- / -	- / -	- / -	- / -	- / -
P-40a	Submarine-Launched Ballistic Missile (SLBM) Radar Warning System			- / 0.000	- / 9.184	- / -	- / -	- / -	- / -
P-40a	Space Situation Awareness Operations			- / 4.036	- / 4.577	- / -	- / -	- / -	- / -
P-40a	Space Situation Awareness Operations			- / 0.000	- / 3.124	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 14.677	- / 31.706	- / -	- / -	- / -	- / -

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Defense Meteorological Satellite Program (SPACE)			- / -	- / -	- / -	- / -	- / -	- / 2.165
P-40a	NAVSTAR Global Positioning System (Space and Control Segments)			- / -	- / -	- / -	- / -	- / -	- / 22.430
P-40a	JSPOC Mission System			- / -	- / -	- / -	- / -	- / -	- / 0.867
P-40a	Submarine-Launched Ballistic Missile (SLBM) Radar Warning System			- / -	- / -	- / -	- / -	- / -	- / 9.184
P-40a	Space Situation Awareness Operations			- / -	- / -	- / -	- / -	- / -	- / 8.613
P-40a	Space Situation Awareness Operations			- / -	- / -	- / -	- / -	- / -	- / 3.124
P-40	Total Gross/Weapon System Cost			- / -	- / 46.383				

*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 0305160F DEF METEOROLOGICAL SAT PROG (SPACE)

FY17 funds C2 subsystems that include, but are not limited to, the phase 2 development and selective recapitalization of the Telemetry and Commanding System (TCS) and updates the communications system to improve supportability.

PE 0305165F NAVSTAR GPS (SPACE AND CONTROL SEGMENTS)

FY17 GPS OCS COTS Upgrade: FY17 funding procures GPS Architecture Evolution Plan (AEP) and Launch Anomaly Resolution and Disposal Operations (LADO) commercial equipment that has become obsolete/unsupportable or requires upgrades. Funding will procure equipment for the OCS ground sites including the Master Control Station (MCS), Alternate Master Control Station (AMCS), four Ground Antennas (GAs), six Monitor Stations (MSs), a contractor lab facility, and the Telecommunications Simulator Test Set (TSTS). Modifications include required procurement, nonrecurring engineering, installation, testing, configuration management, security, quality assurance and technical documentation. Funding sustains OCS until OCX transitions to operations.

PE 0305614F JSPOC MISSION SYSTEM

Where applicable, justification for individual modifications is provided in the P-3A exhibits.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs		P-1 Line Item Number / Title: 836790 / Space Mods Space
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0305165F, 0305940F	Other Related Program Elements: 0305614F, 0305940F
Line Item MDAP/MAIS Code: 166	Item MDAP/MAIS Code(s): N/A	
<p>PE 0305912F SLBM RADAR WARNING SYSTEM</p> <p>Where applicable, justification for individual modifications is provided in the P-3A exhibits.</p> <p>PE 0305940F SPACE SITUATIONAL AWARENESS OPERATIONS</p> <p>Where applicable, justification for individual modifications is provided in the P-3A exhibits.</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6										P-1 Line Item Number / Title: 836790 / Space Mods Space					Aggregated Items Title: Defense Meteorological Satellite Program (SPACE)				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Telemetry and Commanding System	A		-	-	-	-	-	2.165	-	-	-	-	-	-	-	-	-	-	-	-
Mission Plan/Schedule	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Communications	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	0.000	-	-	2.165	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	0.000	-	-	2.165	-	-	-	-	-	-	-	-	-	-	-	-
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Telemetry and Commanding System	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.165
Mission Plan/Schedule	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Communications	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.165
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.165

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

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6							P-1 Line Item Number / Title: 836790 / Space Mods Space							Aggregated Modification Items Title: NAVSTAR Global Positioning System (Space and Control Segments)					

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
NAVSTAR GPS-OCS COTS UPGRADE / NAVSTAR GPS-OCS COTS UPGRADE			-	-	9.774	-	-	12.656	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	9.774	-	-	12.656	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
NAVSTAR GPS-OCS COTS UPGRADE / NAVSTAR GPS-OCS COTS UPGRADE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.430	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.430	

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
NAVSTAR GPS-OCS COTS UPGRADE / NAVSTAR GPS-OCS COTS UPGRADE	GPS-OCS	Reliability & Maintainability

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6 **P-1 Line Item Number / Title:** 836790 / Space Mods Space **Aggregated Items Title:** JSPOC Mission System

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Joint Space Operations Center Mission System	A		-	-	0.867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	0.867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	0.867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Joint Space Operations Center Mission System	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.867	
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.867	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.867	

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

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6							P-1 Line Item Number / Title: 836790 / Space Mods Space							Aggregated Modification Items Title: Submarine-Launched Ballistic Missile (SLBM) Radar Warning System					

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-3A PAVE PAWS Modifications / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)			-	-	-	-	-	9.184	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	0.000	-	-	9.184	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-3A PAVE PAWS Modifications / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.184	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.184	

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
P-3A PAVE PAWS Modifications / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)	NA	Reliability & Maintainability

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6 **P-1 Line Item Number / Title:** 836790 / Space Mods Space **Aggregated Items Title:** Space Situation Awareness Operations

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
New Item	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net-Centric Sensors and Data Sources (N-CSDS) (PE 0305940F)	A		-	-	4.036	-	-	4.577	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	4.036	-	-	4.577	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	4.036	-	-	4.577	-	-	-	-	-	-	-	-	-	-	-	-

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
New Item	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net-Centric Sensors and Data Sources (N-CSDS) (PE 0305940F)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.613
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.613
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.613

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

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6 **P-1 Line Item Number / Title:** 836790 / Space Mods Space **Aggregated Modification Items Title:** Space Situation Awareness Operations

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-3A GEODSS / P-3A GEODSS			-	-	-	-	-	3.124	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	0.000	-	-	3.124	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-3A GEODSS / P-3A GEODSS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.124	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.124	

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
P-3A GEODSS / P-3A GEODSS	GEODSS	Service Life Extension

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs **P-1 Line Item Number / Title:** 836810 / Counterspace System

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0604421F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	8.041	59.439	-	-	-	-	-	-	-	-	-	67.480
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	8.041	59.439	-	-	-	-	-	-	-	-	-	67.480
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	8.041	59.439	-	-	-	-	-	-	-	-	-	67.480

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Counter Communications System (CCS) Pre-planned Product Improvement (P3I) program provides expeditionary, deployable, reversible offensive Counterspace effects applicable across the full spectrum of conflict. It prevents adversary satellite communications (SATCOM) in the Area of Responsibility (AOR) including Command and Control (C2), Early Warning, and Propaganda; and hosts Rapid Reaction Capabilities in response to Urgent Needs. Acquisition Decision Memorandum (24 April 2009) directed all capabilities identified in the October 2006 CCS Block 20, JROC-approved Capability Development Document (CDD) shall be accomplished as P3I upgrades to the CCS Block 10.

Funding for this exhibit and developmental funding for CCS is in Program Element 0604421F, Counterspace Systems.

In the FY16 Consolidated Appropriations Act, selected space programs funded with Other Procurement, Air Force (OPAF) were transferred to Space Procurement, Air Force (SPAF) in FY16 and beyond. This exhibit will display values of funding prior to FY16.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 6: Space Programs

P-1 Line Item Number / Title:
 836810 / Counterspace System

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 0604421F **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-5	Counterspace System	P-5a	B	- / 8.041	- / 59.439	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 8.041	- / 59.439	- / -	- / -	- / -	- / -

*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 the FY16 Consolidated Appropriations Act, selected space programs funded with Other Procurement, Air Force (OPAF) were transferred to Space Procurement, Air Force (SPAF) in FY16 and beyond. This exhibit will display values of funding prior to FY16.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836810 / Counterspace System	Item Number / Title [DODIC]: - / Counterspace System
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ID Code (A=Service Ready, B=Not Service Ready) : B **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	8.041	59.439	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	8.041	59.439	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	8.041	59.439	-	-	-	-

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
a. CCS PRE-PLANNED PRODUCT IMPROVEMENT (P31) ^(t)	7.877	1	7.877	6.250	2	12.500	-	-	-	-	-	-	-	-	-	-	-	-
b. Air National Guard CCS ^(t)	-	-	0.000	22.964	2	45.927	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	7.877	-	-	58.427	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	7.877	-	-	58.427	-	-	-	-	-	-	-	-	-	-	-	-
Support - Support End Item Cost																		
e. FFRDC	-	-	0.000	-	-	0.396	-	-	-	-	-	-	-	-	-	-	-	-
f. A&AS	-	-	0.164	-	-	0.616	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Support End Item Cost</i>	-	-	0.164	-	-	1.012	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	8.041	-	-	59.439	-	-	-	-	-	-	-	-	-	-	-	-

^(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 6	P-1 Line Item Number / Title: 836810 / Counterspace System	Item Number / Title [DODIC]: - / Counterspace System
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
a. CCS PRE-PLANNED PRODUCT IMPROVEMENT (P3I)		2014	Harris / Melbourne, FL	Various	LAAFB, CA	Nov 2012	Apr 2014	1	7.877	N	Dec 2013	
a. CCS PRE-PLANNED PRODUCT IMPROVEMENT (P3I)		2015	Harris / Melbourne, FL	Various	LAAFB, CA	Jun 2015	Jun 2017	2	6.250	N	Jan 2015	
b. Air National Guard CCS		2015	Harris / Melbourne, FL	Various	LAAFB, CA	Jun 2015	Dec 2016	2	22.964	N	Jan 2015	

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 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 Items:** N/A **Other Related Program Elements:** 0207422F, 0207444F, 0503133F

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	50.487	137.205	109.836	8.100	117.936	95.154	115.275	81.875	83.347	-	681.279
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	50.487	137.205	109.836	8.100	117.936	95.154	115.275	81.875	83.347	-	681.279
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	50.487	137.205	109.836	8.100	117.936	95.154	115.275	81.875	83.347	-	681.279

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 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 trainers, 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.

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-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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 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 Items: N/A	Other Related Program Elements: 0207422F, 0207444F, 0503133F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	
<p>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.</p> <p>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 Navy-led Mobile User Objective System (MUOS), which legacy radios are not compatible with wideband networking, BGAN, or MUOS.</p> <p>Deployable C3 Systems PE 0207422F - P-40A PE 0207422F DEPLOYABLE COMMAND, CONTROL, and COMMUNICATIONS (C3) SYSTEMS</p> <p>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 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. 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 is employed to provide and support 22 Large Communications Package missions at Combat Communication squadrons, 27 Medium Communications Package missions at Combat Communications and Global Mobility Readiness squadrons and 39 Small Communications Package missions at Air Mobility Command units and Air Control squadrons.</p> <p>The TDC program reached full operational capability in 2008 and is currently providing sustainment and modernization efforts to maintain full operational capability. Modernization efforts focus on addressing Diminishing Manufacturing Sources (DMS) 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 item 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 DOD security mandates/directives and cryptographic modernization standards. The program has three components:</p> <p>a. 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 throughput 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.</p> <p>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 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.</p> <p>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.</p> <p>FY17 Funding includes \$3.6M for Overseas Contingency Operations.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 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 Items: N/A	Other Related Program Elements: 0207422F, 0207444F, 0503133F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), these items are 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.

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 upgrade TACP voice, data and video communications capabilities, upgrade targeting capabilities, and improve TACP 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 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. 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.

The FY 2017 funding request was reduced by \$19.4M to account for the availability of prior year execution balances.

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 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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment
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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
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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(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 dismantled 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 dismantled Battlefield Airmen. Modernization efforts focus on reducing the weight of the equipment carried by the dismantled 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. 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 other equipment.

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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	2,465	3,741	3,292	4	3,296	92	92	92	92
	Total Obligation Authority	47.748	129.626	97.329	6.900	104.229	14.284	13.795	13.952	14.234
AFNG	Quantity	169	91	91	2	93	91	91	91	91
	Total Obligation Authority	2.120	6.435	10.813	1.200	12.013	10.704	10.272	10.122	10.278
AFR	Quantity	17	17	17	-	17	17	17	17	17
	Total Obligation Authority	0.209	1.144	1.694	-	1.694	1.606	1.409	1.883	1.911
Total: Secondary Distribution	Quantity	2,651	3,849	3,400	6	3,406	200	200	200	200
	Total Obligation Authority	50.077	137.205	109.836	8.100	117.936	26.594	25.476	25.957	26.423

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications **P-1 Line Item Number / Title:** 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Tactical Airborne Control Systems	P-5a	A	3 / -	4 / 9.063	21 / 43.187	7 / 15.599	- / -	7 / 15.599
P-40a	Deployable C3 Systems			- / 0.000	- / 3.990	- / 16.762	- / 26.884	- / 3.600	- / 30.484
P-5	Advanced Communications Systems	P-5a	A	- / -	- / -	1,220 / 9.933	1 / 10.397	- / -	1 / 10.397
P-5	Tactical Air Control Party-Mod	P-5a	A	- / 0.000	283 / 20.504	1,030 / 32.151	1,034 / 41.823	- / -	1,034 / 41.823
P-40a	Air Base Ground Defense			- / -	- / -	- / -	- / -	- / 4.500	- / 4.500
P-5	Special Tactics / Combat Control	P-5a	A	- / -	2,164 / 16.520	1,377 / 31.107	2,158 / 15.133	- / -	2,158 / 15.133
P-40a	Combat Rescue - Pararescue (AFR)			- / -	- / -	- / 4.065	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 50.487	- / 137.205	- / 109.836	- / 8.100	- / 117.936

*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, PE 0207588F P-40A Item Tactical Communications Radios, is a new start.

Tactical Airborne Control Systems PE 0207418F - P-5

TACTICAL AIRBORNE CONTROL SYSTEM EQUIPMENT: FY17 funding procures Tactical Air Control Party Fixed, Portable, and Command and Control C2) simulators for training special operations and conventional Joint Terminal Attack Controllers (JTAC).

Deployable C3 Systems PE 0207422F - P-40A

PE 0207422F DEPLOYABLE COMMAND, CONTROL, and COMMUNICATIONS (C3) SYSTEMS

SPOKE SATELLITE TERMINALS: FY17 funding will procure information assurance driven mandated upgrades as required.

INTEGRATED COMMUNICATIONS ACCESS PACKAGE (ICAP): FY17 funding will procure a technical solution based on user functional requirements for a standardized Small Communication Package (SCP) as Directed by Program Action Directive (PAD) 12-07 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, Wireless Distribution Module.

NETWORK CONTROL CENTER-DEPLOYED (NCC-D): FY17 funding will procure software that has reached end-of-life and is no longer supportable. Including mandated upgrades as required.

FY17 funding includes \$3.6M for Overseas Contingency Operations.

PE 020588F: Security Forces (SF) Tactical Communication Radios - P40A

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 0207423F JOINT TACTICAL RADIO SYSTEM/JTRS:

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 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 Items: N/A	Other Related Program Elements: 0207422F, 0207444F, 0503133F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	

FY17 Funds will be used to purchase 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-CCI Radios.

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. FY17 funding will procure the following:

1. TACTICAL OPERATION CENTER (TOC) SYSTEMS: TACP TOC systems include the fielded ASOC Gateway and Gateway Light systems, the transit case mounted, transportable Dismounted Communication Package (DCP), and TOC computer systems. In the near future, it will also include the TACP Transportable Gateway (TTG). 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 be mounted in transit cases, include a multi-band radio for BLOS or 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.

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 new M1165 High Mobility Multi-Wheeled Vehicles (HMMWVs), and the Mobile Communications Systems (MCS) planned for TACP M1145 HMMWVs. In FY16, the TACP-M program will award 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. Following delivery of the MCS, the TACP-M program intends to upgrade or procure new multi-channel data communications systems for M1165 HMMWVs, 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 HMMWVs vehicles and will be adopted by Air Force TACPs as well. Specific requirements and acquisition strategies for those systems will be developed after contract award for the M1145 MCS. In addition, the TACP-M program office expects to modify Stryker communications systems to provide a remote control capability required to use the vehicle-mounted GRC-259 Stryker communications system to conduct TACP communications from a Brigade tactical operations center.

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. Equipment includes, but is 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 Line-of-Sight (LOS) and Beyond-Line-of-Sight (BLOS) data communications with C2 nodes, other TACPs, and attack aircraft. Kit quantities procured in FY17 may change depending on final unit prices, and interim support services may be funded as part of this procurement effort; Handheld Laser Target Designators (LTDs) and Handheld Laser Rangefinders (LRFs) - Dismounted TACPs/JTACs require small, lightweight LTDs and LRF utilizing emerging, off-the-shelf technology which are suitable for use by TACPs and provide a smaller, lighter form-factor over the current systems; 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 include, but is not limited to, batteries, antennas, GPS receivers, storage devices, cases, and other components that facilitate the operation and/or human factor impacts of the dismounted TACP.

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. FY17 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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications 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 Items: N/A	Other Related Program Elements: 0207422F, 0207444F, 0503133F
Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A	

The TACP-M program will also use FY17 funding to support Interim Contractor Support (ICS) for equipment such as, but not limited to, Operational Control Systems (OCS) and targeting devices prior to transitioning to long-term sustainment.

Special Tactics / Combat Control PE 0408011F - P-5
PE 0408011F BATTLEFIELD AIRMEN OPERATIONS (BAO) Kit

BATTLEFIELD AIRMEN OPERATIONS (BAO) Kit: FY17 funding in the amount of \$15.133 million will procure, test, sustain, 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, items included but not limited to training, initial spares, repairs and returns, and other equipment.

a. HUMAN MACHINE INTERFACE (HMI): This FY17 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.

Web-based Geographic Information System (GIS) management tool, used to store, display, update, and report operational information on sensitive global airfields and Assault Zones (AZ) while incorporating approval processes designed to support rapid Global Mobility missions for the USG. Talon Point consists of three main system functions: A fully relational database with associated storage, a visual GIS tool, and a management tool/web application.

b. OPERATIONAL CONTROL SYSTEM (BAO KIT): FY17 funding will procure OCS units which 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 and the ability to perform digitally-aided Close Air Support targeting for all Battlefield Airmen and Special Operations Forces.

c. LINE OF SIGHT (LOS): FY17 funding will procure LOS systems. LOS integrates target designators and sensors to enhance targeting effectiveness at ranges less than 3km. The equipment provides battlefield airmen with the ability to geo-locate targets in both eye-safe and non-eye safe spectrums. The modernization of this equipment will significantly reduce the weight carried by the operator.

Items requested in FY17 as identified on the P-5 Exhibit are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

Combat Rescue - Pararescue (AFR) PE 0503133F - P-40A
PE 0503133F: COMBAT RESCUE - PARARESCUE (AFR)

No FY17 funding requested.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Tactical Airborne Control Systems

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	3	4	21	7	-	7
Gross/Weapon System Cost (\$ in Millions)	-	9.063	43.187	15.599	-	15.599
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	9.063	43.187	15.599	-	15.599
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	9.063	43.187	15.599	-	15.599

(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)	-	2.266	2.057	2.228	-	2.228

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - 0207418F Cost																		
Recurring Cost																		
TACP Fixed Simulators - JTC TRS ^(f)	-	-	-	2.000	4	8.000	2.000	21	42.000	2.000	7	14.000	-	-	-	2.000	7	14.000
<i>Subtotal: Recurring Cost</i>	-	-	-	8.000	-	-	-	-	42.000	-	-	14.000	-	-	-	-	-	14.000
<i>Subtotal: Hardware - 0207418F Cost</i>	-	-	-	8.000	-	-	-	-	42.000	-	-	14.000	-	-	-	-	-	14.000
Support - 0207418F Cost																		
PMA - Contractor Services and other Government Costs	-	-	-	1.063	1	1.063	1.187	1	1.187	1.599	1	1.599	-	-	-	1.599	1	1.599
<i>Subtotal: Support - 0207418F Cost</i>	-	-	-	1.063	-	-	-	-	1.187	-	-	1.599	-	-	-	-	-	1.599
Gross/Weapon System Cost	-	3	-	2.266	4	9.063	2.057	21	43.187	2.228	7	15.599	-	-	-	2.228	7	15.599

Remarks:

Congress provided a \$36M addition in procurement funding in the FY16 Omnibus Appropriations Bill that funded an additional 18 simulators in FY16.

Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	4	21	7	-	7
Total Obligation Authority	9.063	43.187	15.599	-	15.599

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Exhibit P-5, Cost Analysis: PB 2017 Air Force			Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7		P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment		Item Number / Title [DODIC]: - / Tactical Airborne Control Systems		
ID Code (A=Service Ready, B=Not Service Ready) : A			MDAP/MAIS Code:			
Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Total:	Quantity	4	21	7	-	7
Secondary Distribution	Total Obligation Authority	9.063	43.187	15.599	-	15.599

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Tactical Airborne Control Systems
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
TACP Fixed Simulators - JTC TRS		2015	QuantaDyn Corp / Sterling, Virginia	C / FFP	AFLCMC Wright Patterson AFB	Jan 2016	Jun 2016	4	2.000	Y		Aug 2015
TACP Fixed Simulators - JTC TRS		2016	QuantaDyn Corp / Sterling, Virginia	C / FFP	AFLCMC Wright Patterson AFB	Sep 2016	Dec 2016	21	2.000	Y		Aug 2015
TACP Fixed Simulators - JTC TRS		2017	QuantaDyn Corp / Sterling, Virginia	C / FFP	AFLCMC Wright Patterson AFB	Jan 2017	Feb 2017	7	2.000	Y		Aug 2015

Remarks:
Contract was awarded on 7 January 2016.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7 **P-1 Line Item Number / Title:** 837100 / Tactical C-E Equipment **Aggregated Items Title:** Deployable C3 Systems

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware, Recurring																				
TDC - Integrated Communications Access Package	A		-	-	0.000	0.024	88	2.116	0.149	88	13.068	0.167	88	14.716	0.600	6	3.600	0.195	94	18.316
<i>Secondary Distribution</i>																				
AF			-	-		44	1.058		44	6.535		44	7.358		4	2.400		48	9.758	
AFNG			-	-		37	0.890		37	5.494		37	6.187		2	1.200		39	7.387	
AFR			-	-		7	0.168		7	1.039		7	1.171		-	-		7	1.171	
TDC - Network Control Center - Deployed	A		-	-	0.000	0.014	61	0.834	0.035	61	2.127	0.169	61	10.321	-	-	-	0.169	61	10.321
<i>Secondary Distribution</i>																				
AF			-	-		31	0.424		31	1.081		31	5.245		-	-		31	5.245	
AFNG			-	-		27	0.369		27	0.941		27	4.568		-	-		27	4.568	
AFR			-	-		3	0.041		3	0.105		3	0.508		-	-		3	0.508	
TDC - Hub and Spoke Satellite Terminals	A		-	-	0.000	-	51	-	-	51	-	0.002	51	0.110	-	-	-	0.002	51	0.110
<i>Secondary Distribution</i>																				
AF			-	-		17	-		17	-		17	0.037		-	-		17	0.037	
AFNG			-	-		27	-		27	-		27	0.058		-	-		27	0.058	
AFR			-	-		7	-		7	-		7	0.015		-	-		7	0.015	
Subtotal: Hardware, Recurring			-	-	0.000	-	-	2.950	-	-	15.195	-	-	25.147	-	-	3.600	-	-	28.747
Services																				
TDC - PMA Contractor Services	A		-	-	0.000	-	-	0.995	-	-	1.430	-	-	1.509	-	-	-	-	-	1.509
<i>Secondary Distribution</i>																				
AF			-	-		-	-	0.995	-	-	1.430	-	-	1.509	-	-	-	-	-	1.509
TDC - PMA Other Government Costs	A		-	-	0.000	-	-	0.045	-	-	0.137	-	-	0.228	-	-	-	-	-	0.228
<i>Secondary Distribution</i>																				
AF			-	-		-	-	0.045	-	-	0.137	-	-	0.228	-	-	-	-	-	0.228
Subtotal: Services			-	-	0.000	-	-	1.040	-	-	1.567	-	-	1.737	-	-	-	-	-	1.737
Total			-	-	0.000	-	-	3.990	-	-	16.762	-	-	26.884	-	-	3.600	-	-	30.484

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Aggregated Items Title: Deployable C3 Systems

Remarks:

a. CONTROLLED ITEM will be funded with investment funds to purchase military communications equipment classified as critical protection items.

b. PROGRAM MANAGEMENT ADMINISTRATION (PMA):

PMA for TDC supports the operation of the program office in its management and oversight role, to include engineering and technical support, as well as support activities for the program.

c. DIRECT MISSION SUPPORT (DMS):

DMS for TDC includes all support associated with equipment installation, engineering, technical support orders, sustainment engineering, and implementation. This includes the initial bed down and operability testing, technical interchange meetings, and events associated with fielding both hardware and software products, and maintaining configuration control of fielded products.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force						Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7			P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment			Item Number / Title [DODIC]: - / Advanced Communications Systems		
ID Code (A=Service Ready, B=Not Service Ready) : A				MDAP/MAIS Code:				
Resource Summary			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)			-	-	1,220	1	-	1
Gross/Weapon System Cost (\$ in Millions)			-	-	9.933	10.397	-	10.397
Less PY Advance Procurement (\$ in Millions)			-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)			-	-	9.933	10.397	-	10.397
Plus CY Advance Procurement (\$ in Millions)			-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)			-	-	9.933	10.397	-	10.397
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>								
Initial Spares (\$ in Millions)			-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)			-	-	0.008	10.397	-	10.397

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
2-CH Base Station ^(†)	-	-	-	-	-	-	-	-	-	0.050	7	0.350	-	-	-	0.050	7	0.350
2-CH Kit ^(†)	-	-	-	-	-	-	-	-	-	0.002	25	0.050	-	-	-	0.002	25	0.050
PRC-152A Accessory System ^(†)	-	-	-	-	-	-	-	-	-	0.005	21	0.105	-	-	-	0.005	21	0.105
Manpack Radio ^(†)	-	-	-	-	-	-	0.042	232	9.783	0.040	19	0.760	-	-	-	0.040	19	0.760
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	9.783	-	-	1.265	-	-	-	-	-	1.265
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	-	-	-	9.783	-	-	1.265	-	-	-	-	-	1.265
Software - 0207423F Cost																		
Recurring Cost																		
MUOS ^(†)	-	-	-	-	-	-	-	-	-	0.025	350	8.750	-	-	-	0.025	350	8.750
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	8.750	-	-	-	-	-	8.750
<i>Subtotal: Software - 0207423F Cost</i>	-	-	-	-	-	-	-	-	-	-	-	8.750	-	-	-	-	-	8.750
Support - Support End Item Cost																		
PMA Contractor Services	-	-	-	-	-	-	-	-	0.150	-	-	0.182	-	-	-	-	-	0.182
PMA Other Government Costs	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	-	-	-	0.150	-	-	0.382	-	-	-	-	-	0.382

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7						P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment						Item Number / Title [DODIC]: - / Advanced Communications Systems					
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	-	-	-	-	0.008	1,220	9.933	10.397	1	10.397	-	-	-	10.397	1	10.397

Remarks:
a. Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items
b. Program Management Administration (PMA):PMA supports AF JTRS program with Engineering and technical support, as well as, support activities for the program.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	Quantity	-	1,220	1	-	1
	Total Obligation Authority	-	9.933	10.397	-	10.397
Total:	Quantity	-	1,220	1	-	1
Secondary Distribution	Total Obligation Authority	-	9.933	10.397	-	10.397

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Advanced Communications Systems
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
2-CH Base Station		2017	Harris Corporation / Rochester, NY	Various	AFLCMC Hanscom AFB	Feb 2017	May 2017	7	0.050	Y		
2-CH Kit		2017	Harris Corporation / Rochester, NY	Various	AFLCMC Hanscom AFB	Feb 2017	May 2017	25	0.002	Y		
PRC-152A Accessory System		2017	Harris Corporation / Rochester, NY	Various	AFLCMC Hanscom AFB	Feb 2017	Jun 2017	21	0.005	Y		
Manpack Radio		2016	Harris Corporation / Rochester, NY	Various	AFLCMC Hanscom AFB	Jun 2016	Oct 2016	232	0.042	Y		
Manpack Radio		2017	Harris Corporation / Rochester, NY	Various	AFLCMC Hanscom AFB	Feb 2017	May 2017	19	0.040	Y		
MUOS		2017	Harris Corporation / Rochester, NY	Various	AFLCMC Hanscom AFB	Mar 2017	Jul 2017	350	0.025	Y	Feb 2017	

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7		P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment
		Item Number / Title [DODIC]: - / Tactical Air Control Party-Mod

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	283	1,030	1,034	-	1,034
Gross/Weapon System Cost (\$ in Millions)	0.000	20.504	32.151	41.823	-	41.823
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	20.504	32.151	41.823	-	41.823
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	20.504	32.151	41.823	-	41.823

(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)	-	0.072	0.031	0.040	-	0.040

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
DISMOUNTED EQUIPMENT AD ^(†)	-	-	0.000	0.018	183	3.307	0.002	708	1.550	0.003	719	2.226	-	-	-	0.003	719	2.226
DISMOUNTED EQUIPMENT ANG ^(†)	-	-	0.000	0.018	61	1.102	0.002	235	0.517	0.003	240	0.742	-	-	-	0.003	240	0.742
CASS 145 (Service Packs) ^(†)	-	-	0.000	-	-	-	1.200	1	1.200	3.074	1	3.074	-	-	-	3.074	1	3.074
TACP TRANSPORTABLE GATEWAY (TTG) ^(†)	-	-	0.000	-	-	-	0.426	3	1.277	0.427	14	5.973	-	-	-	0.427	14	5.973
MOBILE COMMUNICATIONS SYSTEMS (MCS) ^(†)	-	-	0.000	0.230	32	7.352	0.231	74	17.094	0.231	54	12.479	-	-	-	0.231	54	12.479
<i>Subtotal: Recurring Cost</i>	-	-	0.000	-	-	11.761	-	-	21.638	-	-	24.494	-	-	-	-	-	24.494
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	0.000	-	-	11.761	-	-	21.638	-	-	24.494	-	-	-	-	-	24.494
Hardware - 0207444F Cost																		
Non Recurring Cost																		
MOBILE COMMUNICATIONS SYSTEMS (MCS)	-	-	0.000	2.308	1	2.308	4.863	1	4.863	10.800	1	10.800	-	-	-	10.800	1	10.800
TACP TRANSPORTABLE GATEWAY (TTG)	-	-	0.000	-	-	-	0.026	1	0.026	0.544	1	0.544	-	-	-	0.544	1	0.544

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7 **P-1 Line Item Number / Title:** 837100 / Tactical C-E Equipment **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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Non Recurring Cost</i>	-	-	0.000	-	-	2.308	-	-	4.889	-	-	11.344	-	-	-	-	-	11.344
<i>Subtotal: Hardware - 0207444F Cost</i>	-	-	0.000	-	-	2.308	-	-	4.889	-	-	11.344	-	-	-	-	-	11.344
Support - 0207444F Cost																		
FULL MOTION VIDEO RECEIVER ICS	-	-	0.000	0.067	1	0.067	0.068	1	0.068	-	-	-	-	-	-	-	-	-
OPERATIONAL CONTROL SYSTEM ICS AD	-	-	0.000	-	-	-	0.300	1	0.300	-	-	-	-	-	-	-	-	-
OPERATIONAL CONTROL SYSTEM ICS ANG	-	-	0.000	-	-	-	0.100	1	0.100	-	-	-	-	-	-	-	-	-
CRANE SUPPORT ^(†)	-	-	0.000	4.274	1	4.274	2.706	1	2.706	2.759	1	2.759	-	-	-	2.759	1	2.759
PMA CONTRACTOR SERVICES ^(†)	-	-	0.000	1.193	1	1.193	1.630	1	1.630	2.129	1	2.129	-	-	-	2.129	1	2.129
PMA OTHER GOV'T COSTS	-	-	0.000	0.447	1	0.447	0.601	1	0.601	0.327	1	0.327	-	-	-	0.327	1	0.327
MCS ICS	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TTG ICS	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TARGETING DEVICES ICS	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VCP DELTA KIT (VDK)	-	-	-	0.083	1	0.083	-	-	-	-	-	-	-	-	-	-	-	-
TEST SUPPORT	-	-	-	0.371	1	0.371	0.219	1	0.219	0.770	1	0.770	-	-	-	0.770	1	0.770
<i>Subtotal: Support - 0207444F Cost</i>	-	-	0.000	-	-	6.435	-	-	5.624	-	-	5.985	-	-	-	-	-	5.985
Gross/Weapon System Cost	-	-	0.000	0.072	283	20.504	0.031	1,030	32.151	0.040	1,034	41.823	-	-	-	0.040	1,034	41.823

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	Quantity	205	1,030	1,034	-	1,034
	Total Obligation Authority	19.643	32.151	41.823	-	41.823
AFNG	Quantity	78	-	-	-	-
	Total Obligation Authority	0.861	-	-	-	-
Total: Secondary Distribution	Quantity	283	1,030	1,034	-	1,034
	Total Obligation Authority	20.504	32.151	41.823	-	41.823

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Tactical Air Control Party-Mod
ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:	
^(†) indicates the presence of a P-5a		

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Tactical Air Control Party-Mod
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revision Available	RFP Issue Date
DISMOUNTED EQUIPMENT AD		2015	Black Diamond AT / Chandler Arizona	Various	AFLCMC Wright Patterson AFB	Nov 2015	Feb 2016	183	0.018	Y		
DISMOUNTED EQUIPMENT AD		2016	Atlantic Diving Solution Inc. / Virginia Beach, Virginia	Various	AFLCMC Wright Patterson AFB	Dec 2015	Feb 2016	708	0.002	Y		
DISMOUNTED EQUIPMENT AD		2017	TBD / TBD	Various	TBD	Sep 2017	Jan 2018	719	0.003	Y		
DISMOUNTED EQUIPMENT ANG		2015	Black Diamond AT / Chandler Arizona	Various	AFLCMC Wright Patterson AFB	Nov 2015	Feb 2016	61	0.018	Y		
DISMOUNTED EQUIPMENT ANG		2016	Atlantic Diving Solution Inc. / Virginia Beach, Virginia	Various	AFLCMC Wright Patterson AFB	Dec 2015	Feb 2016	235	0.002	Y		
DISMOUNTED EQUIPMENT ANG		2017	TBD / TBD	Various	TBD	Sep 2017	Jan 2018	240	0.003	Y		
CASS 145 (Service Packs)		2016	Rockwell Collins / El Segundo, California	PO	AFLCMC Hanscom AFB	Sep 2016	Sep 2016	1	1.200	Y		
CASS 145 (Service Packs)		2017	Rockwell Collins / El Segundo, California	PO	AFLCMC Hanscom AFB	Sep 2017	Sep 2017	1	3.074	Y		
TACP TRANSPORTABLE GATEWAY (TTG)		2016	Source Selection/TBD / Various	Various	AFLCMC Hanscom AFB	Sep 2016	Oct 2016	3	0.426	Y		
TACP TRANSPORTABLE GATEWAY (TTG)		2017	Source Selection/TBD / Various	Various	AFLCMC Hanscom AFB	Sep 2017	Oct 2017	14	0.427	Y		
MOBILE COMMUNICATIONS SYSTEMS (MCS)		2015	Source Selection/TBD / Various	Various	AFLCMC Hanscom AFB	Feb 2016	May 2016	32	0.230	Y		
MOBILE COMMUNICATIONS SYSTEMS (MCS)		2016	Source Selection/TBD / Various	Various	AFLCMC Hanscom AFB	Feb 2017	May 2017	74	0.231	Y		
MOBILE COMMUNICATIONS SYSTEMS (MCS)		2017	Source Selection/TBD / Various	Various	AFLCMC Hanscom AFB	Sep 2017	Dec 2017	54	0.231	Y		
CRANE SUPPORT		2015	NAVSURFWARCENDIV / Crane, Indiana	MIPR	N/A	Dec 2014	Jan 2015	1	4.274	Y		
CRANE SUPPORT		2016	NAVSURFWARCENDIV / Crane, Indiana	MIPR	N/A	Dec 2015	Jan 2016	1	2.706	Y		
CRANE SUPPORT		2017	NAVSURFWARCENDIV / Crane, Indiana	MIPR	N/A	Dec 2016	Jan 2017	1	2.759	Y		
PMA CONTRACTOR SERVICES		2015	Various / AFLCMC Hanscom AFB	Various	AFLCMC Hanscom AFB	Oct 2014	Mar 2015	1	1.193	Y		
PMA CONTRACTOR SERVICES		2016	Various / AFLCMC Hanscom AFB	Various	AFLCMC Hanscom AFB	Oct 2015	Mar 2016	1	1.630	Y		
PMA CONTRACTOR SERVICES		2017	Various / AFLCMC Hanscom AFB	Various	AFLCMC Hanscom AFB	Oct 2016	Mar 2017	1	2.129	Y		

Remarks:
 The MCS Contract is currently in Source Selection.
 The current schedule reflects an award in Feb 2016.
 Dismounted unit costs fluctuate based on equipment types purchased.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Aggregated Items Title: Air Base Ground Defense
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total				
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)		
Uncategorized																						
Tactical Communications Radios	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.500	-	-	4.500
<i>Secondary Distribution</i>																						
AF				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.500		-	4.500
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.500	-	-	4.500
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.500	-	-	4.500

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

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Special Tactics / Combat Control

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	2,164	1,377	2,158	-	2,158
Gross/Weapon System Cost (\$ in Millions)	-	16.520	31.107	15.133	-	15.133
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	16.520	31.107	15.133	-	15.133
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	16.520	31.107	15.133	-	15.133

(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)	-	0.008	0.023	0.007	-	0.007

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

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
HUMAN MACHINE INTERFACE ^(†)	-	-	-	0.004	1,720	7.217	0.004	1,073	4.292	0.004	1,749	6.996	-	-	-	0.004	1,749	6.996
OPERATIONAL CONTROL SYSTEM (BAO KIT) ^(†)	-	-	-	0.015	430	6.450	0.015	294	4.410	0.015	402	6.030	-	-	-	0.015	402	6.030
LINE OF SIGHT ^(†)	-	-	-	0.200	12	2.400	0.200	7	1.400	0.200	5	1.000	-	-	-	0.200	5	1.000
BAO KIT/VEHICLE COMMS/MOBILE GATEWAY	-	-	-	-	-	-	19.900	1	19.900	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	16.067	-	-	30.002	-	-	14.026	-	-	-	-	-	14.026
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	16.067	-	-	30.002	-	-	14.026	-	-	-	-	-	14.026
Support - Support End Item Cost																		
PMA CONTRACTOR SERVICES ^(†)	-	-	-	0.208	1	0.208	0.906	1	0.906	0.906	1	0.906	-	-	-	0.906	1	0.906
PMA OTHER GOVERNMENT COSTS	-	-	-	0.245	1	0.245	0.199	1	0.199	0.201	1	0.201	-	-	-	0.201	1	0.201
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	0.453	-	-	1.105	-	-	1.107	-	-	-	-	-	1.107
Gross/Weapon System Cost	-	-	-	0.008	2,164	16.520	0.023	1,377	31.107	0.007	2,158	15.133	-	-	-	0.007	2,158	15.133

Remarks:

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Exhibit P-5, Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Special Tactics / Combat Control
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ID Code (A=Service Ready, B=Not Service Ready) : A **MDAP/MAIS Code:**

- a. Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items.
- b. Program Management Administration (PMA): Cost support management with engineering and technical implementation. PMA supports Program TDC with Engineering, and technical support activities.

	Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
AF	Quantity	2,164	1,377	2,158	-	2,158
	Total Obligation Authority	16.520	31.107	15.133	-	15.133
Total: Secondary Distribution	Quantity	2,164	1,377	2,158	-	2,158
	Total Obligation Authority	16.520	31.107	15.133	-	15.133

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Item Number / Title [DODIC]: - / Special Tactics / Combat Control
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
HUMAN MACHINE INTERFACE		2015	Multiple / Multiple	Various	AFLCMC Wright Patterson AFB	Feb 2015	May 2015	1,720	0.004	Y		
HUMAN MACHINE INTERFACE		2016	Multiple / Multiple	Various	AFLCMC Wright Patterson AFB	Oct 2015	Jan 2016	1,073	0.004	Y		
HUMAN MACHINE INTERFACE		2017	Multiple / Multiple	Various	AFLCMC Wright Patterson AFB	Dec 2016	Mar 2017	1,749	0.004	Y		
OPERATIONAL CONTROL SYSTEM (BAO KIT)		2015	Black Diamond, LLC. / AZ	SS / FFP	AFLCMC Wright Patterson AFB	Jul 2015	Aug 2015	430	0.015	Y		
OPERATIONAL CONTROL SYSTEM (BAO KIT)		2016	Black Diamond, LLC. / AZ	SS / FFP	AFLCMC Wright Patterson AFB	Feb 2016	Mar 2016	294	0.015	Y		
OPERATIONAL CONTROL SYSTEM (BAO KIT)		2017	Black Diamond, LLC / AZ	SS / FFP	AFLCMC Wright Patterson AFB	Feb 2017	Mar 2017	402	0.015	Y		
LINE OF SIGHT		2015	ARGON ST, INC / FL	C / FFP	AFLCMC Wright Patterson AFB	Apr 2015	Jul 2015	12	0.200	Y		
LINE OF SIGHT		2016	ARGON ST, INC / FL	C / FFP	AFLCMC Wright Patterson AFB	Apr 2016	Jul 2016	7	0.200	Y		
LINE OF SIGHT		2017	ARGON ST, INC / FL	C / FFP	AFLCMC Wright Patterson AFB	Apr 2017	Jul 2017	5	0.200	Y		
PMA CONTRACTOR SERVICES		2015	Multiple / Multiple	Various	AFLCMC Wright Patterson AFB	Oct 2014	Mar 2015	1	0.208	Y		
PMA CONTRACTOR SERVICES		2016	Multiple / Multiple	Various	AFLCMC Wright Patterson AFB	Oct 2015	Mar 2016	1	0.906	Y		
PMA CONTRACTOR SERVICES		2017	Multiple / Multiple	Various	AFLCMC Wright Patterson AFB	Oct 2016	Mar 2017	1	0.906	Y		

Remarks:
 1. FY15 OCS Source Selection contract awarded Jul/2015.
 2. PMA Contractor Service include Travel. A&AS contract with SUMARIA INC, Danvers, MA; C/FFP. POP Mar of current FY thru Feb next FY. In FY 16 EPASS contract will add additional cost to PMA.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837100 / Tactical C-E Equipment	Aggregated Items Title: Combat Rescue - Pararescue (AFR)
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Combat Rescue-Pararescue	A		-	-	-	-	-	-	4.065	1	4.065	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	4.065		-	-		-	-		-	
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	4.065	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	-	4.065	-	-	-	-	-	-	-	-	

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base **P-1 Line Item Number / Title:** 837190 / Radio 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	14.846	8.400	16.266	-	16.266	15.588	13.990	14.237	14.493	-	97.820
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	14.846	8.400	16.266	-	16.266	15.588	13.990	14.237	14.493	-	97.820
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	14.846	8.400	16.266	-	16.266	15.588	13.990	14.237	14.493	-	97.820

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program procures and integrates 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 integrating software that provides the military functionality required for the COTS equipment to operate. This integrating software is a COTS-based product that has been modified 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 high-power HF C2 network serving the Department of Defense (DoD). HFGCS consists of 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, 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. The HFGCS has also been identified as a key communications component in supporting operations in an anti-access area-denial (A2AD) environment.

The HFGCS program has recently completed the Alternate Network Control Station at Grand Forks AFB, ND, eliminating a major single point of failure of the HFGCS network. Additionally, the program has modernized the system consoles to provide increased system security and operations capabilities and has installed additional radios at HFGCS stations to consolidate with US Navy operations, allowing the Navy to close obsolete HF stations. FY17 funds Direct Mission Support/Program Management Administration (DMS/PMA), System Engineering, JITC Installation Testing and Shipping costs for these procurement efforts.

Funding for this effort is in program element 0303133F

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base **P-1 Line Item Number / Title:** 837190 / Radio 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Radio Equipment	P-5a	A	- / -	- / 14.846	- / 8.400	- / 16.266	- / -	- / 16.266
P-40	Total Gross/Weapon System Cost			- / -	- / 14.846	- / 8.400	- / 16.266	- / -	- / 16.266

*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:

The HFGCS FY17 program supports two main projects within the SCOPE Command Radio/Network Infrastructure Modernization and continues the Antenna Replacement program.

1. SCOPE Command Radio/Network Infrastructure Modernization continues the implementation of improved COTS radio and console capabilities into the HFGCS network. The current projects improve 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). FY17 funds Direct Mission Support/ Program Management Administration (DMS/PMA), System Engineering, JITC Installation Testing and Shipping costs for these procurement efforts.

A. HIGH FREQUENCY GLOBAL NEXT GENERATION CONSOLE (HFG NGC) Modernization: FY17 continues HFG NGC Modernization by funding the installation of Increment 4, Efficiencies. NGC Efficiencies increment production was funded in FY15. The NGC Efficiencies increment eliminates Any Console/Any Station (ACAS) operator control inefficiencies and limits degradation of HF services due to HFGCS operator manpower restrictions and workload. NGC redesigns the operator user interface to make it more intuitive to support today's radio operator, realigned under the computer client system administrator career field.

B. HFGCS Network Modernization (Unified Capabilities/Audio Communications Functionality): FY17 continues the modernization of the HFGCS network from an analog based to internet protocol (IP) based network. HFGCS must ensure their circuit interfaces are compatible with DISA architecture evolution as identified in the DISN Technical Evolution Plan dated 25 May 2010 and the DISN Overarching Technical Strategy 2011 dated 31 Aug 2011. The Unified Capabilities (UC) will migrate the HFGCS network away from Legacy interfaces and aligns HFGCS with the DISA vision. In addition to the DISA transition from an analog to IP based network, the audio subsystem switching system is past its end of life. The Audio Communications (AC) functionality will replace/eliminate the 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 HFGCS ability to develop advanced capabilities. Removing the LS-3 and IDPX-1000 DES from the HFGCS and/or replacing them with Open Architecture, non-proprietary, commercially available, modular components maintains compatibility with the DISN Technical Evolution Plan and DISN Overarching Technical Strategy. This modernization will also position the program to leverage wideband/digital HF.

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. FY17 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 FY17 have been identified at Hawaii, with Elmendorf, Ascension Island, Joint Base Andrews, West Coast, Guam, Croughton, Lajes, Sigonella, Offutt, Yokota, and Hawaii scheduled for follow-on efforts.

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Exhibit P-5, Cost Analysis: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837190 / Radio Equipment	Item Number / Title [DODIC]: - / Radio Equipment

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	14.846	8.400	16.266	-	16.266
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	14.846	8.400	16.266	-	16.266
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	14.846	8.400	16.266	-	16.266

(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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
SCOPE Command-NextGen Console Framework/Unified Capabilities/Audio Communications Functionality ^(†)	-	-	-	2.261	2	4.521	1.083	2	2.165	2.027	6	12.162	-	-	-	2.027	6	12.162
HFGCS Station Antenna Replacements ^(†)	-	-	-	1.084	9	9.755	1.107	5	5.533	1.200	3	3.600	-	-	-	1.200	3	3.600
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	14.276	-	-	7.698	-	-	15.762	-	-	-	-	-	15.762
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	14.276	-	-	7.698	-	-	15.762	-	-	-	-	-	15.762
Command and Launch - CommandAndLaunch End Item Cost																		
Direct Mission Support (DMS) [Systems Engineering, Testing, Shipping]	-	-	-	-	-	0.300	-	-	0.372	-	-	0.269	-	-	-	-	-	0.269
PMA Contractor Services	-	-	-	-	-	0.200	-	-	0.245	-	-	0.175	-	-	-	-	-	0.175
PMA Other Government Costs	-	-	-	-	-	0.070	-	-	0.085	-	-	0.060	-	-	-	-	-	0.060
<i>Subtotal: Command and Launch - CommandAndLaunch End Item Cost</i>	-	-	-	-	-	0.570	-	-	0.702	-	-	0.504	-	-	-	-	-	0.504

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Exhibit P-5, Cost Analysis: PB 2017 Air Force												Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7						P-1 Line Item Number / Title: 837190 / Radio Equipment						Item Number / Title [DODIC]: - / Radio Equipment					
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.

Cost Elements	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	-	-	-	14.846	-	-	8.400	-	-	16.266	-	-	-	-	-	16.266

Remarks:

Controlled Item will be funded with investment funds to purchase military communications equipment classified as critical protection items.

Each site has unique site installation requirements (i.e. terrain, weather, environmental laws, international/NATO coordination). Locations range from Diego Garcia, Ascension Island, Lajes, and Guam (mid-ocean locations, volcanic terrain and weather issues); Maryland and California (environmental laws); Yokota, Croughton, and Sigonella (international/NATO coordination). As such, unit cost varies from year to year.

(t) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837190 / Radio Equipment	Item Number / Title [DODIC]: - / Radio Equipment
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
SCOPE Command-NextGen Console Framework/Unified Capabilities/Audio Communications Functionality		2015	Rockwell-Collins / Richardson, TX	SS / FFP	AFLCMC Tinker AFB	Jun 2015	Nov 2015	2	2.261	Y		
SCOPE Command-NextGen Console Framework/Unified Capabilities/Audio Communications Functionality		2016	Rockwell-Collins / Richardson, TX	SS / FFP	AFLCMC Tinker AFB	Apr 2016	Oct 2016	2	1.083	Y		
SCOPE Command-NextGen Console Framework/Unified Capabilities/Audio Communications Functionality		2017	Rockwell-Collins / Richardson, TX	SS / FFP	AFLCMC Tinker AFB	Jan 2017	Jul 2017	6	2.027	Y		
HFGCS Station Antenna Replacements		2015	Long-Wave International / Oklahoma City, OK	C / IDIQ	AFLCMC Tinker AFB	Jan 2015	Jun 2015	9	1.084	Y		
HFGCS Station Antenna Replacements		2016	Long-Wave International / Oklahoma City, OK	C / IDIQ	AFLCMC Tinker AFB	Feb 2016	Jul 2016	5	1.107	Y		
HFGCS Station Antenna Replacements		2017	Long-Wave International / Oklahoma City, OK	C / IDIQ	AFLCMC Tinker AFB	May 2017	Aug 2017	3	1.200	Y		

Remarks:
 Variances in FY15 to FY17 unit costs in Next Generation Console, Network Modernization (Unified Capabilities/Audio Comm Functionality) are due to cost differences in Production (higher cost) and Installation (lower cost) portions of each increment. FY15 has 1 Installation and 1 Production effort; FY16 has 2 Installations [resulting in lowest unit cost]; and FY17 has 2 Increment Installations and 1 Production effort.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 7: Organization and Base

P-1 Line Item Number / Title:
837240 / CCTV/Audiovisual 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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	3.635	6.144	7.449	-	7.449	5.427	4.977	5.064	5.157	-	37.853
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	3.635	6.144	7.449	-	7.449	5.427	4.977	5.064	5.157	-	37.853
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	3.635	6.144	7.449	-	7.449	5.427	4.977	5.064	5.157	-	37.853

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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.

Information Technology Services Management - Other PE 0305550F - P-40A

WESTERN TEST RANGE DIGITAL IMAGING SYSTEMS: This program replaces obsolete, 35 year-old high-speed engineering film cameras with high-speed digital imaging systems. This capital equipment replacement procures items to maintain current capability. These cameras are mounted on mobile optical tracking systems and on camera towers next to the launch pad to provide detailed slow motion photography of the launch events. The cameras support satellite, ballistic, missile defense, and aeronautical missions on the Western Test Range and at Kodiak Island, Alaska. The optical data acquired by these engineering camera systems is a vital part of post flight performance analysis of all space and ballistic launch operations and is critical for Test and Evaluation programs now being conducted by the Missile Defense Agency (MDA) at Vandenberg AFB. Optical tracking provides detailed engineering sequential photography for anomaly resolution and accident reconstruction at distances up to 60 kilometers, and is required for all current and future MDA tests and Delta IV, Atlas IV, Delta II, Peacekeeper, Minuteman, Airborne Laser, Kinetic Kill Vehicle, and commercial space launches. These digital systems replace film camera systems that are no longer logistically supportable.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base

P-1 Line Item Number / Title:
837240 / CCTV/Audiovisual 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Visual Information Activities - Strategic			- / -	- / 1.990	- / 6.144	- / 7.449	- / -	- / 7.449
P-40a	Information Technology Services Management - Other			- / -	- / 1.645	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 3.635	- / 6.144	- / 7.449	- / -	- / 7.449

*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:

Visual Information Activities - Strategic PE 0102890F - P-40A
 FY17 Funds procure items to meet AF 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.

Information Technology Services Management - Other PE 0305550F - P-40A
 WESTERN TEST RANGE DIGITAL IMAGING SYSTEMS: No FY17 funding requested.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7 **P-1 Line Item Number / Title:** 837240 / CCTV/Audiovisual Equipment **Aggregated Items Title:** Visual Information Activities - Strategic

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CCTV/AUDIO VISUAL EQUIPMENT - AB1000	A		-	-	-	-	-	0.679	-	-	0.534	-	-	0.720	-	-	-	-	-	0.720
CCTV/AUDIO VISUAL EQUIPMENT - AB2000 COMCAM	A		-	-	-	-	-	1.311	-	-	2.466	-	-	3.000	-	-	-	-	-	3.000
CCTV/AUDIO VISUAL EQUIPMENT - AB2000 WESTERN TEST RANGE	A		-	-	-	-	-	-	-	-	3.144	-	-	3.729	-	-	-	-	-	3.729
Subtotal: Uncategorized			-	-	-	-	-	1.990	-	-	6.144	-	-	7.449	-	-	-	-	-	7.449
Total			-	-	-	-	-	1.990	-	-	6.144	-	-	7.449	-	-	-	-	-	7.449

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7							P-1 Line Item Number / Title: 837240 / CCTV/Audiovisual Equipment							Aggregated Items Title: Information Technology Services Management - Other					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Western Test Range Digital Imaging Systems Equipment	A		-	-	-	1.645	1	1.645	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	1.645	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	1.645	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base **P-1 Line Item Number / Title:** 837300 / Base Comm Infrastructure

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	95.759	82.410	109.215	-	109.215	111.780	62.315	46.097	49.178	-	556.754
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	95.759	82.410	109.215	-	109.215	111.780	62.315	46.097	49.178	-	556.754
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	95.759	82.410	109.215	-	109.215	111.780	62.315	46.097	49.178	-	556.754

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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.

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.

Service Support to Other Core Missions - STRATCOM (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.

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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base		P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure
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	Item MDAP/MAIS Code(s): N/A	
<p>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. This is a continuing requirement.</p> <p>AF Network Ops and Command Comms PE 0207425F - P-40A AF Network Operations (AFNETOPS): AFNETOPS with Air Force Space Command (AFSPC) oversight provides the AF with operations and security functions, central management of core Information Technology (IT) services, enterprise trouble desk support, and network control.</p> <p>Engineering and Installation - Air Force PE 0207436F - P-40A 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.</p> <p>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. This is a continuing requirement. 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 throughout PACAF significantly raises the importance of a robust communications infrastructure to ensure war fighter access to secure voice, data, and video systems. This is a continuing requirement. FY15 funding totals include \$1.970M for Overseas Contingency Operations (OCO). 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. This is a continuing requirement. 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. This is a continuing requirement. FY16 funding totals include \$15.400M for Overseas Contingency Operations (OCO).</p> <p>Long-Haul Communications - DCS PE 0303126F - P-40A USAFE Technical Control Facility Program Equipment: This USAFE 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 to meet specifications required to connect Defense Information Systems Agency (DISA) long haul circuit equipment to base facilities. This is a continuing requirement.</p> <p>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 of communications equipment and buried cable and alarm equipment. These efforts directly impact sustainment efforts and crypto upgrades for the aging WS3 system installed at multiple nuclear capable sites.</p> <p>Information Technology Services Management - Other PE 0305550F - P-40A</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base		P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure
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	Item MDAP/MAIS Code(s): N/A	
<p>a. Air Force District of Washington (AFDW) Base Communications Network Equipment: Funds support the procurement of network infrastructure replacements, and support of 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.</p> <p>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.</p> <p>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.</p> <p>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 base communications infrastructure at AFRC, an AF MAJCOM consisting of a HQ, three Numbered Air Forces (NAFs), 45 flying wings/groups and more than 40 Geographically Separated Units (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.</p> <p>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.</p> <p>Information Technology Services Management - ANG PE 0508550F - P-40A ANG Base Communications Infrastructure Equipment: Funds provide for life cycle support of base communications infrastructure at 89 ANG flying wings and more than 106 GSUs, including the ANG Network Operations and Security Center (NOSC). Funds support ANG-wide base communications infrastructure projects consistent with AF IT standards and for compatibility of the ANG enterprise with the AF and the Department of Defense (DoD) centralized networks. This is a continuing requirement.</p> <p>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.</p> <p>Information Technology Services Management - Logistics PE 0708550F - P-40A Air Force Materiel Command (AFMC) Base Communications infrastructure Equipment: Funding supports command wide and base approved, MAJCOM validated communications requirements as identified in base communications blueprints. Funding ensures life cycle support to manage legacy Time Division Multiplex (TDM) telephone switches and communications infrastructure due to end of shelf life and end of parts support. This funding provides the ability to migrate to a Voice over IP (VoIP) Assured Services Local Area Network (ASLAN) solution improving critical C2 and keeps base communications infrastructure on pace with current technological developments. The program supports procurement of LMR trunking systems at AFMC locations in direct support for emergency responders participating in base, local, civil and federal disaster response as well as Battle Staff and Crisis Action Team (CAT) operations. These support the Agile Combat Support (ACS), logistical, command and control mission, as well as first responder services at 9 AFMC bases supporting 100,000 personnel.</p> <p>In response to the Ft Hood incident and in accordance with DoD instruction 6055.17, DoD policy mandates every installation implement a Mass Notification System (MNS) to notify and direct personnel and populace in the event of major accidents, natural disasters, wartime or terrorist attacks, and other contingencies. This system is a critical aspect to alert, warn and provide instructions to the base population of current and predicted threats. This is a continuing requirement.</p> <p>Information Technology Services Management - Training PE 0808550F - P-40A</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base **P-1 Line Item Number / Title:** 837300 / Base Comm Infrastructure

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 **Item MDAP/MAIS Code(s):** N/A

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 support the 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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	72.311	80.135	98.107	-	98.107	93.441	32.454	33.024	33.619
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	23.129	1.993	10.781	-	10.781	10.548	8.940	9.098	9.261
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.319	0.282	0.327	-	0.327	0.333	0.339	0.345	0.351
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	95.759	82.410	109.215	-	109.215	104.322	41.733	42.467	43.231

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications
Equip / BSA 7: Organization and Base

P-1 Line Item Number / Title:
837300 / Base Comm Infrastructure

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	MINUTEMAN Communications			- / -	- / -	- / 6.060	- / -	- / -	- / -
P-40a	Contingency Operations			- / -	- / -	- / 2.499	- / -	- / -	- / -
P-40a	Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)			- / -	- / -	- / 3.439	- / 41.817	- / -	- / 41.817
P-40a	Communications and Information Technology			- / -	- / -	- / -	- / 5.812	- / -	- / 5.812
P-40a	PE 0207138F - F-22A Squadrons			- / -	- / 1.072	- / 0.814	- / 0.971	- / -	- / 0.971
P-40a	AF Network Ops and Command Comms			- / -	- / 0.846	- / -	- / -	- / -	- / -
P-40a	Engineering and Installation - Air Force			- / -	- / 36.884	- / 15.574	- / -	- / -	- / -
P-40a	Information Technology Services Management - Tactical Air Forces			- / -	- / 12.702	- / 18.374	- / 36.578	- / -	- / 36.578
P-40a	Long-Haul Communications - DCS			- / -	- / 0.648	- / 0.077	- / -	- / -	- / -
P-40a	Theater Nuclear Weapon Storage & Security System			- / -	- / -	- / 7.163	- / 6.159	- / -	- / 6.159
P-40a	Information Technology Services Management - Other			- / -	- / 14.590	- / 23.297	- / 3.082	- / -	- / 3.082
P-40a	Information Technology Services Management - Mobility Air Forces			- / -	- / 0.853	- / 0.638	- / 0.738	- / -	- / 0.738
P-40a	Information Technology Services Management - AFR			- / -	- / 0.319	- / 0.282	- / 0.327	- / -	- / 0.327
P-40a	Information Technology Services Management - ANG			- / -	- / 23.129	- / 1.993	- / 10.781	- / -	- / 10.781
P-40a	Information Technology Services Management - Logistics			- / -	- / 2.263	- / 1.540	- / 1.785	- / -	- / 1.785
P-40a	Information Technology Services Management - Training			- / -	- / 2.453	- / 0.660	- / 1.165	- / -	- / 1.165
P-40	Total Gross/Weapon System Cost			- / -	- / 95.759	- / 82.410	- / 109.215	- / -	- / 109.215

*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, PE 0308611F P-40A Item AFSPC Communications Infrastructure Equipment, is a new start.

MINUTEMAN Communications PE 0101323F - P-40A
No FY17 funding requested.

Contingency Operations PE 0208028F - P-40A
U.S. Air Forces in Europe and Air Forces Africa (USAFE-AFAFRICA) Contingency Operations Infrastructure Equipment: No FY17 funding requested.

Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities) PE 0208059F - P-40A
USCYBERCOM Communications Infrastructure: FY17 funding will continue procurement of communications equipment (e.g., servers, routers, LANs, End Building Node (EBN) hardware) that support ongoing USCYBERCOM activities. In addition, funds will acquire and install communications infrastructure for the "Fit-Out" of the USCYBERCOM Joint Operations Center. Specifically, the Fit-Out includes procurement/installation/customization of classified and non-classified audio video multimedia equipment; Defense Red Switch Network (DRSN), information technology cryptologic equipment and video-teleconferencing systems, and mission system backbone equipment. The procurement of Fit-Out equipment aligns with the MILCON schedule.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base		P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure
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	Item MDAP/MAIS Code(s): N/A	
<p>Communications and Information Technology PE 0308611F - P-40A AFSPC Communications Infrastructure Equipment: FY17 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 unified capabilities and the joint enterprise.</p> <p>F-22A Squadrons PE 0207138F - P-40A F-22 Communications Infrastructure Equipment: FY17 funds will be used to procure communications infrastructure equipment in support of F-22 aircraft.</p> <p>AF Network Ops and Command Comms PE 0207425F - P-40A AF Network Operations (AFNETOPS): No FY17 funding requested.</p> <p>Engineering and Installation - Air Force PE 0207436F - P-40A AFSPC Lead Command Base Communications Infrastructure: No FY17 funding requested.</p> <p>Information Technology Services Management - Tactical Air Forces PE 0208550F - P-40A a. AFSOC Base Communications Infrastructure Equipment: FY17 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. PACAF Base Communications Infrastructure Equipment: FY17 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 flexible basing strategy for the Pacific region. c. ACC Base Communications Infrastructure Equipment: FY17 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: FY17 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, FY17 funds procure communications infrastructure to support the European Infrastructure Consolidation (EIC) program. EIC is an OSD-directed process to restructure basing of forces within the European Command (EUCOM) Area of Responsibility (AOR).</p> <p>Long-Haul Communications - DCS PE 0303126F - P-40A USAFE Technical Control Facility Program Equipment: No FY17 funding requested.</p> <p>Theater Nuclear Weapon Storage & Security System PE 0305155F - P-40A Theater Nuclear Weapon Storage and Security System (WS3) Communications Infrastructure Equipment: FY17 funding supports the procurement of communications equipment and buried cable and alarm equipment. This equipment procurement supports the NATO nuclear deterrence mission in Europe.</p> <p>Information Technology Services Management - Other PE 0305550F - P-40A a. Air Force District Washington (AFDW) Base Communications Network Equipment: FY17 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).</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 7: Organization and Base		P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure
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	Item MDAP/MAIS Code(s): N/A	

b. AFSPC Base Communications Infrastructure Equipment: No FY17 funding requested.

Information Technology Services Management - Mobility Air Forces PE 0408550F - P-40A

Air Force District Washington (AFDW) Base Communications Infrastructure Equipment: FY17 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-quality, 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: FY17 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

ANG Base Communications Infrastructure Equipment: FY17 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) Network Equipment: FY17 funds support command wide and base approved, MAJCOM validated communications requirements providing 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.

Information Technology Services Management - Training PE 0808550F - P-40A

Air Education and Training Command (AETC) Base Communications Infrastructure Equipment: FY17 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: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure	Aggregated Items Title: MINUTEMAN Communications
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Minuteman Communications Infrastructure	A		-	-	-	-	-	-	-	-	6.060	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	6.060		-	-		-	-		-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	6.060	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	6.060	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7 **P-1 Line Item Number / Title:** 837300 / Base Comm Infrastructure **Aggregated Items Title:** Contingency Operations

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
USAFE-AFAFRICA Contingency Operations Infrastructure	A		-	-	-	-	-	-	-	2.499	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	2.499	-	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	-	-	-	-	-	2.499	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	-	-	2.499	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure	Aggregated Items Title: Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
USCYBER COMMAND																				
USCYBERCOM Communications Infrastructure	A		-	-	-	-	-	-	-	-	3.439	-	-	41.817	-	-	-	-	-	41.817
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	3.439		-	41.817		-	-		-	41.817
Subtotal: USCYBER COMMAND			-	-	-	-	-	-	-	-	3.439	-	-	41.817	-	-	-	-	-	41.817
Total			-	-	-	-	-	-	-	-	3.439	-	-	41.817	-	-	-	-	-	41.817

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7						P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure						Aggregated Items Title: Communications and Information Technology							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AFSPC																				
AFSPC Communications Infrastructure Equipment	A		-	-	-	-	-	-	-	-	-	-	-	5.812	-	-	-	-	-	5.812
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	5.812	-	-	-	-	-	5.812
Subtotal: AFSPC			-	-	-	-	-	-	-	-	-	-	-	5.812	-	-	-	-	-	5.812
Total			-	-	-	-	-	-	-	-	-	-	-	5.812	-	-	-	-	-	5.812

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure	Aggregated Items Title: PE 0207138F - F-22A Squadrons
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
F-22 Communications Infrastructure Equipment	A		-	-	-	-	-	1.072	-	-	0.814	-	-	0.971	-	-	-	-	-	0.971
<i>Secondary Distribution</i>																				
AF				-	-		-	1.072		-	0.814		-	0.971		-	-		-	0.971
Subtotal: Uncategorized			-	-	-	-	-	1.072	-	-	0.814	-	-	0.971	-	-	-	-	-	0.971
Total			-	-	-	-	-	1.072	-	-	0.814	-	-	0.971	-	-	-	-	-	0.971

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure	Aggregated Items Title: AF Network Ops and Command Comms
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Air Force Network Operations (AFNETOPS)																				
AFNETOPS Network Communications Equipment	A		-	-	-	-	-	0.846	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	0.846		-	-		-	-		-	-		-	-
Subtotal: Air Force Network Operations (AFNETOPS)			-	-	-	-	-	0.846	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	0.846	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AFSPC E&I																				
AFSPC Lead Command Base Communications Infrastructure	A		-	-	-	-	-	36.884	-	-	15.574	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	36.884	-	-	15.574	-	-	-	-	-	-	-	-	-
Subtotal: AFSPC E&I			-	-	-	-	-	36.884	-	-	15.574	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	36.884	-	-	15.574	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
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				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ITSM - Tactical AF's																				
AFSOC Base Communications Infrastructure Equipment	A		-	-	-	-	-	0.650	-	-	0.573	-	-	0.665	-	-	-	-	-	0.665
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.650	-	-	0.573	-	-	0.665	-	-	-	-	-	0.665
PACAF Base Communications Infrastructure Equipment	A		-	-	-	-	-	2.994	-	-	0.690	-	-	0.634	-	-	-	-	-	0.634
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	2.994	-	-	0.690	-	-	0.634	-	-	-	-	-	0.634
ACC Base Communications Infrastructure Equipment	A		-	-	-	-	-	0.788	-	-	0.585	-	-	0.479	-	-	-	-	-	0.479
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.788	-	-	0.585	-	-	0.479	-	-	-	-	-	0.479
USAFE-AFAFRICA Base Communications Infrastructure Equipment	A		-	-	-	-	-	8.270	-	-	16.526	-	-	34.800	-	-	-	-	-	34.800
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	8.270	-	-	16.526	-	-	34.800	-	-	-	-	-	34.800
Subtotal: ITSM - Tactical AF's			-	-	-	-	-	12.702	-	-	18.374	-	-	36.578	-	-	-	-	-	36.578
Total			-	-	-	-	-	12.702	-	-	18.374	-	-	36.578	-	-	-	-	-	36.578

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7	P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure	Aggregated Items Title: Long-Haul Communications - DCS
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
USAFE Tech Control																				
USAFE Technical Control Facility Program Equipment	A		-	-	-	-	-	0.648	-	-	0.077	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	0.648		-	0.077		-	-		-	-		-	
Subtotal: USAFE Tech Control			-	-	-	-	-	0.648	-	-	0.077	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	0.648	-	-	0.077	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 7						P-1 Line Item Number / Title: 837300 / Base Comm Infrastructure						Aggregated Items Title: Theater Nuclear Weapon Storage & Security System							

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Theater Nuclear WS3																				
Theater Nuclear Weapon Storage and Security System (WS3) Communications Infrastructure Equipment	A		-		-	-		-		7.163		-		6.159		-		-		6.159
<i>Secondary Distribution</i>																				
AF			-		-	-		-		7.163		-		6.159		-		-		6.159
Subtotal: Theater Nuclear WS3			-		-	-		-		7.163		-		6.159		-		-		6.159
Total			-		-	-		-		7.163		-		6.159		-		-		6.159

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016					
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										
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ITSM - Other																				
AFDW Base Communications Network Equipment	A		-	-	-	-	-	6.031	-	-	3.033	-	-	3.082	-	-	-	-	-	3.082
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	6.031	-	-	3.033	-	-	3.082	-	-	-	-	-	3.082
AFSPC Base Communications Infrastructure Equipment	A		-	-	-	-	-	8.559	-	-	20.264	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	8.559	-	-	20.264	-	-	-	-	-	-	-	-	-
Subtotal: ITSM - Other			-	-	-	-	-	14.590	-	-	23.297	-	-	3.082	-	-	-	-	-	3.082
Total			-	-	-	-	-	14.590	-	-	23.297	-	-	3.082	-	-	-	-	-	3.082

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force															Date: February 2016				
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				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ITSM - Mobility AF's																				
AFDW Base Communications Infrastructure Equipment	A		-	-	-	-	-	0.853	-	-	0.638	-	-	0.738	-	-	-	-	-	0.738
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.853	-	-	0.638	-	-	0.738	-	-	-	-	-	0.738
Subtotal: ITSM - Mobility AF's			-	-	-	-	-	0.853	-	-	0.638	-	-	0.738	-	-	-	-	-	0.738
Total			-	-	-	-	-	0.853	-	-	0.638	-	-	0.738	-	-	-	-	-	0.738

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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 - AFR
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ITSM - AFR																				
AFRC Base Communications Infrastructure Equipment	A		-	-	-	-	-	0.319	-	-	0.282	-	-	0.327	-	-	-	-	-	0.327
<i>Secondary Distribution</i>																				
AFR			-	-	-	-	-	0.319	-	-	0.282	-	-	0.327	-	-	-	-	-	0.327
Subtotal: ITSM - AFR			-	-	-	-	-	0.319	-	-	0.282	-	-	0.327	-	-	-	-	-	0.327
Total			-	-	-	-	-	0.319	-	-	0.282	-	-	0.327	-	-	-	-	-	0.327

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

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
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ITSM - ANG																				
ANG Base Communications Infrastructure Equipment	A		-	-	-	-	-	23.129	-	-	1.993	-	-	10.781	-	-	-	-	-	10.781
<i>Secondary Distribution</i>																				
AFNG			-	-	-	-	-	23.129	-	-	1.993	-	-	10.781	-	-	-	-	-	10.781
Subtotal: ITSM - ANG			-	-	-	-	-	23.129	-	-	1.993	-	-	10.781	-	-	-	-	-	10.781
Total			-	-	-	-	-	23.129	-	-	1.993	-	-	10.781	-	-	-	-	-	10.781

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
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					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ITSM - Logistics																				
AFMC Base Communications Infrastructure Equipment	A		-	-	-	-	-	2.263	-	-	1.540	-	-	1.785	-	-	-	-	-	1.785
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	2.263	-	-	1.540	-	-	1.785	-	-	-	-	-	1.785
Subtotal: ITSM - Logistics			-	-	-	-	-	2.263	-	-	1.540	-	-	1.785	-	-	-	-	-	1.785
Total			-	-	-	-	-	2.263	-	-	1.540	-	-	1.785	-	-	-	-	-	1.785

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

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
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					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
ITSM - Training																				
AETC Base Communications Infrastructure Equipment	A		-	-	-	-	-	2.453	-	-	0.660	-	-	1.165	-	-	-	-	-	1.165
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	2.453	-	-	0.660	-	-	1.165	-	-	-	-	-	1.165
Subtotal: ITSM - Training			-	-	-	-	-	2.453	-	-	0.660	-	-	1.165	-	-	-	-	-	1.165
Total			-	-	-	-	-	2.453	-	-	0.660	-	-	1.165	-	-	-	-	-	1.165

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 8: Modifications **P-1 Line Item Number / Title:** 838010 / Comm Elect Mods

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0305111F, 0305909F, 0305912F **Other Related Program Elements:** 0305111F, 0305909F

Line Item MDAP/MAIS Code: None **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	165.460	60.826	78.650	65.700	3.800	69.500	67.684 ^(a)	55.319 ^(b)	55.949 ^(c)	56.953 ^(d)	-	610.341 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	165.460	60.826	78.650	65.700	3.800	69.500	67.684	55.319	55.949	56.953	-	610.341
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	165.460	60.826	78.650	65.700	3.800	69.500	67.684	55.319	55.949	56.953	-	610.341

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Shared Early Warning (SEW) PE 0308699F - P-40A

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 commanders (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. SEWS requires substantial upgrades in both commercial off the shelf (COTS) and government off the shelf (GOTS) hardware and software in order to support new Defense Information Systems Agency (DISA) mandated data processing capabilities, new missile warning message formats, and cyber security requirements set forth in Department of Defense Instruction 8500.1 (DODI 8500.1). SEWS will not be able to sustain the missile warning message delivery accuracy and timeliness required by policy or program directives without these hardware and software upgrades. FY17 funding will be used to replace outdated hardware and software component such as, but not limited to, virtual processors, routers, intrusion detection software, network logging software and other material solutions required for operational and cyber security continuity.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	1	1	1	-	1	1	1	1	1
	Total Obligation Authority	58.956	78.650	65.700	3.800	69.500	67.684	55.319	55.949	56.953
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.360	-	-	-	-	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.510	-	-	-	-	-	-	-	-
Total:	Quantity	1	1	1	-	1	1	1	1	1

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 8: Modifications	P-1 Line Item Number / Title: 838010 / Comm Elect Mods
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0305111F, 0305909F, 0305912F	Other Related Program Elements: 0305111F, 0305909F
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Line Item MDAP/MAIS Code: None	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
Secondary Distribution	Total Obligation Authority	60.826	78.650	65.700	3.800	69.500	67.684	55.319	55.949	56.953

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 8: Modifications **P-1 Line Item Number / Title:** 838010 / Comm Elect Mods

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** 0305111F, 0305909F, 0305912F **Other Related Program Elements:** 0305111F, 0305909F

Line Item MDAP/MAIS Code: None **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Atmospheric Early Warning System			- / 114.167	- / 3.970	- / -	- / -	- / -	- / -
P-40a	Weather Service			- / 13.290	- / 12.075	- / 8.492	- / 6.468	- / -	- / 6.468
P-3a	1 / Joint Environmental Toolkit (JET) Refresh (Capability Improvement)			- / -	- / -	- / -	- / 2.178	- / -	- / 2.178
P-40a	Air Traffic Control, Approach, and Landing System (ATCALs)			- / 1.698	- / 1.099	- / 0.761	- / 1.402	- / -	- / 1.402
P-3a	1 / ATCALs AN/GRN-29 Instrument Landing System (PE 0305114F) (Capability Improvement)			- / 24.476	- / 13.427	- / 3.219	- / 7.121	- / -	- / 7.121
P-3a	2 / Deployable TACAN Retrofit/Refurbishment (Reliability & Maintainability)			- / -	- / -	- / -	- / -	- / 3.800	- / 3.800
P-3a	1 / National Airspace System (NAS) Mod 1 (Capability Improvement)			- / -	- / -	- / -	- / 1.519	- / -	- / 1.519
P-40a	Ballistic Missile Early Warning System (BMEWS)			- / -	- / -	- / 6.850	- / -	- / -	- / -
P-40a	Ballistic Missile Early Warning System (BMEWS)			- / 0.000	- / 3.565	- / 0.250	- / 0.200	- / -	- / 0.200
P-3a	1 / Mod HEMP (Reliability & Maintainability)			- / 0.000	- / -	- / 49.000	- / 18.943	- / -	- / 18.943
P-3a	2 / BMEWS DP/SP Suite Replacement (Reliability & Maintainability)			- / 11.255	- / 26.361	- / 9.858	- / 17.486	- / -	- / 17.486
P-3a	1 / PAVE PAWS Block 00 Update (Reliability & Maintainability)			- / -	- / -	- / -	- / 4.690	- / -	- / 4.690
P-3a	2 / P-3A PARCS Modification (formerly PARCS PARSS) (Reliability & Maintainability)			- / 0.000	- / -	- / -	- / 0.750	- / -	- / 0.750
P-3a	3 / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End) (Reliability & Maintainability)			- / 0.000	- / -	- / -	- / 0.300	- / -	- / 0.300
P-3a	4 / PARCS Block 00 Update (Reliability & Maintainability)			- / -	- / -	- / -	- / 4.240	- / -	- / 4.240
P-40a	Shared Early Warning (SEW)			- / 0.574	- / 0.329	- / 0.220	- / 0.403	- / -	- / 0.403
P-40	Total Gross/Weapon System Cost			- / 165.460	- / 60.826	- / 78.650	- / 65.700	- / 3.800	- / 69.500

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Atmospheric Early Warning System			- / -	- / -	- / -	- / -	- / -	- / 118.137
P-40a	Weather Service			- / 8.032	- / 7.014	- / 7.138	- / 7.280	- / -	- / 69.789
P-3a	1 / Joint Environmental Toolkit (JET) Refresh (Capability Improvement)			- / 2.026	- / 1.823	- / 1.856	- / 1.875	- / -	- / 9.758
P-40a	Air Traffic Control, Approach, and Landing System (ATCALs)			- / 1.345	- / 1.209	- / 1.229	- / 1.250	- / -	- / 9.993
P-3a	1 / ATCALs AN/GRN-29 Instrument Landing System (PE 0305114F) (Capability Improvement)			- / 3.996	- / -	- / -	- / -	- / -	- / 52.239
P-3a	2 / Deployable TACAN Retrofit/Refurbishment (Reliability & Maintainability)			- / -	- / -	- / -	- / -	- / -	- / 3.800
P-3a	1 / National Airspace System (NAS) Mod 1 (Capability Improvement)			- / 7.435	- / 3.861	- / 5.814	- / 5.918	- / -	- / 24.547
P-40a	Ballistic Missile Early Warning System (BMEWS)			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Ballistic Missile Early Warning System (BMEWS)			- / 25.436	- / 22.859	- / 23.262	- / 23.681	- / -	- / 99.253

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force	Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 03: Electronics and Telecommunications Equip / BSA 8: Modifications	P-1 Line Item Number / Title: 838010 / Comm Elect Mods

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0305111F, 0305909F, 0305912F	Other Related Program Elements: 0305111F, 0305909F
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Line Item MDAP/MAIS Code: None	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	1 / Mod HEMP (Reliability & Maintainability)			- / -	- / -	- / -	- / -	- / -	- / 67.943
P-3a	2 / BMEWS DP/SP Suite Replacement (Reliability & Maintainability)			- / -	- / -	- / -	- / -	- / -	- / 64.960
P-3a	1 / PAVE PAWS Block 00 Update (Reliability & Maintainability)			- / 0.600	- / -	- / -	- / -	- / -	- / 5.290
P-3a	2 / P-3A PARCS Modification (formerly PARCS PARSS) (Reliability & Maintainability)			- / 8.763	- / 9.102	- / 8.148	- / 8.294	- / -	- / 35.057
P-3a	3 / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End) (Reliability & Maintainability)			- / 8.913	- / 9.103	- / 8.148	- / 8.295	- / -	- / 34.759
P-3a	4 / PARCS Block 00 Update (Reliability & Maintainability)			- / 0.750	- / -	- / -	- / -	- / -	- / 4.990
P-40a	Shared Early Warning (SEW)			- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 67.684	- / 55.319	- / 55.949	- / 56.953	- / -	- / 610.341

*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, PE 0305114F, P-3A Mod ATCALs, Deployable TACAN Retrofit/Refurbishment, is a new start.
 This program, PE 0305137F Mods, P-3A NAS Mod 1, National Airspace System (NAS) Mod 1, is a new start.

Where applicable, justification for individual modifications is provided in the P-3A exhibits.

Efforts with funding starting in FY 2018 through FY 2021 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 2018 Cost Delta: 0.388 million
- (b) FY 2019 Cost Delta: 0.348 million
- (c) FY 2020 Cost Delta: 0.354 million
- (d) FY 2021 Cost Delta: 0.360 million
- (e) FY Total Cost Delta: 9.826 million

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8						P-1 Line Item Number / Title: 838010 / Comm Elect Mods						Aggregated Modification Items Title: Atmospheric Early Warning System							

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
SC3I AEWS - FPS-117 EPRP / SC3I AEWS - FPS-117 EPRP			-	-	114.167	-	-	3.970	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF				-	-		-	3.970		-	-		-	-		-	-		-	
Total			-	-	114.167	-	-	3.970	-	-	-	-	-	-	-	-	-	-	-	

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
SC3I AEWS - FPS-117 EPRP / SC3I AEWS - FPS-117 EPRP			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118.137	
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118.137	

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
SC3I AEWS - FPS-117 EPRP / SC3I AEWS - FPS-117 EPRP	AN/FPS-117	Service Life Extension

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force															Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Aggregated Modification Items Title: Weather Service										
Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
00-001 / Next Generation Radar (NEXRAD) WSR-88D Upgrades			-	-	1.007	-	-	-	-	-	0.017	-	-	0.017	-	-	-	-	-	0.017
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	0.017		-	0.017		-	-		-	0.017
07-001 / Numerical Weather Modeling			-	-	3.526	-	-	4.549	-	-	1.320	-	-	1.000	-	-	-	-	-	1.000
<i>Secondary Distribution</i>																				
AF				-	-		-	4.549		-	1.320		-	1.000		-	-		-	1.000
08-001 / AN/FMQ-7 Solar Optical Observing Network (SOON)			-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.000
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	1.000		-	-		-	1.000
09-001 / AN/UMQ-13 MARK IV-B			-	-	3.756	-	-	3.000	-	-	-	-	-	1.000	-	-	-	-	-	1.000
<i>Secondary Distribution</i>																				
AF				-	-		-	3.000		-	-		-	1.000		-	-		-	1.000
11-003 / AN/TMQ-53 Tactical Meteorological Observing System (TMOS)			-	-	0.822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
13-009 / WSR-88D Next Generation Radar (NEXRAD) Service Life Extension			-	-	-	-	-	2.073	-	-	2.369	-	-	1.932	-	-	-	-	-	1.932
<i>Secondary Distribution</i>																				
AF				-	-		-	2.073		-	2.369		-	1.932		-	-		-	1.932
14-001 / Next Generation Radar (NEXRAD) WSR-88D IT Refresh			-	-	-	-	-	-	-	-	0.366	-	-	0.172	-	-	-	-	-	0.172
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	0.366		-	0.172		-	-		-	0.172
14-007 / Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP)			-	-	-	-	-	-	-	-	3.100	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	3.100		-	-		-	-		-	-
16-002 / AN/FMQ-23 Refresh			-	-	-	-	-	-	-	-	-	-	-	0.347	-	-	-	-	-	0.347

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8 **P-1 Line Item Number / Title:** 838010 / Comm Elect Mods **Aggregated Modification Items Title:** Weather Service

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	0.347		-	-		-	0.347
98-001 / Weather Data Analysis			-	-	3.679		-	2.453		-	1.320		-	1.000		-	-		-	1.000
<i>Secondary Distribution</i>																				
AF				-	-		-	2.453		-	1.320		-	1.000		-	-		-	1.000
P-3A Low Cost Modifications / P-3A Low Cost Modifications			-	-	0.500		-	-		-	-		-	-		-	-		-	-
Total			-	-	13.290		-	12.075		-	8.492		-	6.468		-	-		-	6.468
Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
00-001 / Next Generation Radar (NEXRAD) WSR-88D Upgrades			-	-	0.017		-	0.017		-	0.017		-	0.017		-	-		-	1.109
<i>Secondary Distribution</i>																				
AF				-	0.017		-	0.017		-	0.017		-	0.017		-	-		-	-
07-001 / Numerical Weather Modeling			-	-	1.000		-	1.036		-	1.054		-	1.135		-	-		-	14.620
<i>Secondary Distribution</i>																				
AF				-	1.000		-	1.036		-	1.054		-	1.135		-	-		-	-
08-001 / AN/FMQ-7 Solar Optical Observing Network (SOON)			-	-	-		-	-		-	-		-	-		-	-		-	1.000
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
09-001 / AN/UMQ-13 MARK IV-B			-	-	1.500		-	1.500		-	1.527		-	1.542		-	-		-	13.825
<i>Secondary Distribution</i>																				
AF				-	1.500		-	1.500		-	1.527		-	1.542		-	-		-	-
11-003 / AN/TMQ-53 Tactical Meteorological Observing System (TMOS)			-	-	-		-	-		-	-		-	-		-	-		-	0.822
<i>Secondary Distribution</i>																				
AF				-	-		-	-		-	-		-	-		-	-		-	-
13-009 / WSR-88D Next Generation Radar (NEXRAD) Service Life Extension			-	-	3.371		-	1.784		-	1.654		-	1.862		-	-		-	15.045

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8 **P-1 Line Item Number / Title:** 838010 / Comm Elect Mods **Aggregated Modification Items Title:** Weather Service

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				-	3.371		-	1.784		-	1.654		-	1.862		-	-		-	-
14-001 / Next Generation Radar (NEXRAD) WSR-88D IT Refresh			-	-	0.344	-	-	0.218	-	-	0.385	-	-	0.127	-	-	-	-	-	1.612
<i>Secondary Distribution</i>																				
AF				-	0.344		-	0.218		-	0.385		-	0.127		-	-		-	-
14-007 / Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP)			-	-	0.800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.900
<i>Secondary Distribution</i>																				
AF				-	0.800		-	-		-	-		-	-		-	-		-	-
16-002 / AN/FMQ-23 Refresh			-	-	-	-	-	1.423	-	-	1.447	-	-	1.462	-	-	-	-	-	4.679
<i>Secondary Distribution</i>																				
AF				-	-		-	1.423		-	1.447		-	1.462		-	-		-	-
98-001 / Weather Data Analysis			-	-	1.000	-	-	1.036	-	-	1.054	-	-	1.135	-	-	-	-	-	12.677
<i>Secondary Distribution</i>																				
AF				-	1.000		-	1.036		-	1.054		-	1.135		-	-		-	-
P-3A Low Cost Modifications / P-3A Low Cost Modifications			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.500
Total			-	-	8.032	-	-	7.014	-	-	7.138	-	-	7.280	-	-	-	-	-	69.789

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
00-001 / Next Generation Radar (NEXRAD) WSR-88D Upgrades	WSR-88D	Capability Improvement
07-001 / Numerical Weather Modeling	Weather Data Analysis	Capability Improvement
08-001 / AN/FMQ-7 Solar Optical Observing Network (SOON)	AN/FMQ-7	Capability Improvement
09-001 / AN/UMQ-13 MARK IV-B	AN/UMQ-13	Capability Improvement
11-003 / AN/TMQ-53 Tactical Meteorological Observing System (TMOS)	AN/TMQ-53	Capability Improvement

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Aggregated Modification Items Title: Weather Service
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Item Number / Title	Models of Systems Affected	Modification Type
13-009 / WSR-88D Next Generation Radar (NEXRAD) Service Life Extension	WSR-88D	Service Life Extension
14-001 / Next Generation Radar (NEXRAD) WSR-88D IT Refresh	WSR-88D	Capability Improvement
14-007 / Radio Solar Telescope Network Service Life Extension Program (RSTN SLEP)	RSTN, AN/FRR-95 (RIMS) & A/F24U-1 (SRS)	Capability Improvement
16-002 / AN/FMQ-23 Refresh	AN/FMQ-23	Reliability & Maintainability
98-001 / Weather Data Analysis	Weather Data Analysis	Capability Improvement
P-3A Low Cost Modifications / P-3A Low Cost Modifications	Weather Service	Capability Improvement

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods						Modification Number / Title: 1 / Joint Environmental Toolkit (JET) Refresh		

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	2.178	-	2.178	2.026	1.823	1.856	1.875	-	9.758
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	2.178	-	2.178	2.026	1.823	1.856	1.875	-	9.758
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	2.178	-	2.178	2.026	1.823	1.856	1.875	-	9.758
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Joint Environmental Toolkit (JET)--Provides a standard AF Weather forecasters' toolkit to ingest weather data and deliver timely, tailorable, precise weather impacts to the warfighter.

Milestone/Development Status

AML Program

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	2.178	-	2.178	2.026	1.823	1.856	1.875
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	2.178	-	2.178	2.026	1.823	1.856	1.875

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / Joint Environmental Toolkit (JET) Refresh

Models of Systems Affected: Joint Environmental Tool Kit	Modification Type: Capability Improvement	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Procurement												
<i>Modification Item 1 of 1:</i> JET Refresh												
B Kits												
Recurring												
JET Refresh:EQUIPMENT Group B (Active)	- / -	- / -	- / -	1 / 2.178	- / -	1 / 2.178	1 / 2.026	1 / 1.823	1 / 1.856	1 / 1.875	- / -	5 / 9.758
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 2.178	- / -	- / 2.178	- / 2.026	- / 1.823	- / 1.856	- / 1.875	- / -	- / 9.758
<i>Subtotal: JET Refresh</i>	- / -	- / -	- / -	- / 2.178	- / -	- / 2.178	- / 2.026	- / 1.823	- / 1.856	- / 1.875	- / -	- / 9.758
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / 2.178	- / -	- / 2.178	- / 2.026	- / 1.823	- / 1.856	- / 1.875	- / -	- / 9.758
Installation												
<i>Modification Item 1 of 1:</i> JET Refresh	- / -	- / -	- / -	1 / -	- / -	1 / -	1 / -	1 / -	1 / -	1 / -	- / -	5 / -
<i>Subtotal: Installation</i>	- / -	- / -	- / -	1 / -	- / -	1 / -	1 / -	1 / -	1 / -	1 / -	- / -	5 / -
Total												
Total Cost (Procurement + Support + Installation)	-	-	-	2.178	-	2.178	2.026	1.823	1.856	1.875	-	9.758

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / Joint Environmental Toolkit (JET) Refresh

Modification Item 1 of 1: JET Refresh

Manufacturer Information

Manufacturer Name: Unknown	Manufacturer Location: Unknown
Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 0

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	1 / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -	1 / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	1 / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	1 / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -	1 / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -	1 / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	1 / -	- / -	1 / -	1 / -	1 / -	1 / -	1 / -	- / -	5 / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4																										
In	0	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	6
Out	0	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	6

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force															Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 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)									

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-3A Low Cost Mods / ATCALs Low Cost Mods (PE 0305114F)			-	-	1.698	-	-	1.099	-	-	0.761	-	-	1.402	-	-	-	-	-	1.402
<i>Secondary Distribution</i>																				
AF				-	-		-	1.099		-	0.761		-	1.402		-	-		-	1.402
Total			-	-	1.698	-	-	1.099	-	-	0.761	-	-	1.402	-	-	-	-	-	1.402

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-3A Low Cost Mods / ATCALs Low Cost Mods (PE 0305114F)			-	-	1.345	-	-	1.209	-	-	1.229	-	-	1.250	-	-	-	-	-	9.993
<i>Secondary Distribution</i>																				
AF				-	1.345		-	1.209		-	1.229		-	1.250		-	-		-	-
Total			-	-	1.345	-	-	1.209	-	-	1.229	-	-	1.250	-	-	-	-	-	9.993

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
P-3A Low Cost Mods / ATCALs Low Cost Mods (PE 0305114F)	ATCALs	Service Life Extension

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / ATCAL5 AN/GRN-29 Instrument Landing System (PE 0305114F)

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	24.476	13.427	3.219	7.121	-	7.121	3.996	-	-	-	-	52.239
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	24.476	13.427	3.219	7.121	-	7.121	3.996	-	-	-	-	52.239
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	24.476	13.427	3.219	7.121	-	7.121	3.996	-	-	-	-	52.239
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

AN/GRN-29, INSTRUMENT LANDING SYSTEM (ILS) MODIFICATION: The ILS consists of two subsystems which provide horizontal (localizer) and vertical (glide slope) guidance to allow aircraft to make a precision approach to a runway in inclement weather. The current 1970s era ILS systems are approaching the end of their intended life cycle, yet these systems will be required until approximately 2030. The AN/GRN-29 modification includes new localizer electronics, glide slope electronics, and glide slope antennas. The localizer antennas have already been replaced. The new equipment will also provide improved reliability and reduce manpower through remote adjustment and flight inspection capabilities. Equipment procurement and installation are being accomplished through a turnkey contract, that will be followed with interim contractor support and stand-up of an organic depot.

FY17 funds will procure/install 17 modification kits (17 AD/0 ANG/0 AFR).

The FY 2017 funding request was reduced by \$4.259 million to account for the availability of prior year execution balances.

Milestone/Development Status

In full rate production.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	11.557	3.219	7.121	-	7.121	3.996	-	-	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.360	-	-	-	-	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.510	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	13.427	3.219	7.121	-	7.121	3.996	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Modification Number / Title: 1 / ATCAL5 AN/GRN-29 Instrument Landing System (PE 0305114F)			
Models of Systems Affected: GRN-29				Modification Type: Capability Improvement				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1:</i> GRN-29 ILS													
B Kits													
Recurring													
GRN-29 ILS:EQUIPMENT Group B (Active)	98 / 10.093	4 / 0.428	15 / 1.650	17 / 1.904	- / -	17 / 1.904	- / -	- / -	- / -	- / -	- / -	134 / 14.075	
GRN-29 ILS:EQUIPMENT Group B (Guard)	2 / 0.210	8 / 0.856	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 1.066	
GRN-29 ILS:EQUIPMENT Group B (Reserve)	6 / 0.630	3 / 0.321	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 0.951	
<i>Subtotal: Recurring</i>	- / 10.933	- / 1.605	- / 1.650	- / 1.904	- / -	- / 1.904	- / -	- / -	- / -	- / -	- / -	- / 16.092	
<i>Subtotal: GRN-29 ILS</i>	- / 10.933	- / 1.605	- / 1.650	- / 1.904	- / -	- / 1.904	- / -	- / -	- / -	- / -	- / -	- / 16.092	
<i>Subtotal: Procurement, All Modification Items</i>	- / 10.933	- / 1.605	- / 1.650	- / 1.904	- / -	- / 1.904	- / -	- / -	- / -	- / -	- / -	- / 16.092	
Support (All Modification Items)													
GROUP B: TOTAL NONRECURRING	- / 1.668	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.668	
OTHER GOVT	- / 2.434	- / 3.711	- / -	- / 2.467	- / -	- / 2.467	- / 1.688	- / -	- / -	- / -	- / -	- / 10.300	
Type 1 Training	- / 0.461	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.461	
ICS-Material	- / 0.282	- / 0.510	- / 0.200	- / 0.225	- / -	- / 0.225	- / 0.230	- / -	- / -	- / -	- / -	- / 1.447	
Change Orders	- / -	- / 2.297	- / -	- / 0.338	- / -	- / 0.338	- / -	- / -	- / -	- / -	- / -	- / 2.635	
PMA - Contractor Services	- / 0.510	- / 0.547	- / 0.122	- / 0.245	- / -	- / 0.245	- / 0.220	- / -	- / -	- / -	- / -	- / 1.644	
SUPPORT-EQUIP	- / 1.650	- / 3.618	- / 0.108	- / 0.656	- / -	- / 0.656	- / 1.858	- / -	- / -	- / -	- / -	- / 7.890	
PMA - Other Gov't Costs	- / 0.395	- / 0.194	- / 0.196	- / 0.198	- / -	- / 0.198	- / -	- / -	- / -	- / -	- / -	- / 0.983	
<i>Subtotal: Support</i>	- / 7.400	- / 10.877	- / 0.626	- / 4.129	- / -	- / 4.129	- / 3.996	- / -	- / -	- / -	- / -	- / 27.028	
Installation													
<i>Modification Item 1 of 1:</i> GRN-29 ILS	106 / 6.143	15 / 0.945	15 / 0.943	17 / 1.088	- / -	17 / 1.088	- / -	- / -	- / -	- / -	- / -	153 / 9.119	
<i>Subtotal: Installation</i>	106 / 6.143	15 / 0.945	15 / 0.943	17 / 1.088	- / -	17 / 1.088	- / -	- / -	- / -	- / -	- / -	153 / 9.119	
Total													
Total Cost (Procurement + Support + Installation)	24.476	13.427	3.219	7.121	-	7.121	3.996	-	-	-	-	52.239	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / ATCAL5 AN/GRN-29 Instrument Landing System (PE 0305114F)

Modification Item 1 of 1: GRN-29 ILS

Manufacturer Information

Manufacturer Name: Selex	Manufacturer Location: Overland Park, KS
Administrative Leadtime (in Months): 4	Production Leadtime (in Months): 2

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Feb 2015	Feb 2016	Feb 2017				
Delivery Dates	Apr 2015	Apr 2016	Apr 2017				

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	106 / 6.143	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	106 / 6.143
FY 2015	- / -	15 / 0.945	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 0.945
FY 2016	- / -	- / -	15 / 0.943	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 0.943
FY 2017	- / -	- / -	- / -	17 / 1.088	- / -	17 / 1.088	- / -	- / -	- / -	- / -	- / -	17 / 1.088
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	106 / 6.143	15 / 0.945	15 / 0.943	17 / 1.088	- / -	17 / 1.088	- / -	- / -	- / -	- / -	- / -	153 / 9.119

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot	
		Q1	Q2	Q3	Q4																											
In	86	10	10	5	5	5	5	5	5	5	5	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	86	10	10	5	5	5	5	5	5	5	5	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods				Modification Number / Title: 2 / Deployable TACAN Retrofit/ Refurbishment				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	-	3.800	3.800	-	-	-	-	-	3.800
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	-	3.800	3.800	-	-	-	-	-	3.800
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	-	3.800	3.800	-	-	-	-	-	3.800
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program, PE 0305114F, P-3A Mod ATCALs, Deployable TACAN Retrofit/Refurbishment, is a new start.

The Deployable TACAN (D-TACAN) system provides navigation and night/adverse weather landing capability to military aircraft at deployed locations and is critical to the AFCENT combat flying mission. The D-TACANs are used to set up bare base airfields and to restore airfields that have been damaged, destroyed, or sabotaged. Systems have been deployed in extreme environmental conditions since 2008 and require major overhaul/refurbishment prior to any re-deployments. These systems also require an extensive modification/retrofit to meet the configuration of the current AF Deployable TACAN the AN/TRN-48.

FY17 OCO funds modify/refurbish 3 Deployable TACANs (3 AD/0 ANG/0 AFR)

Milestone/Development Status

TRN-48 Deployable TACAN modification/refurbishment kit proof complete. Three system previously upgraded with prior year funds.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	3.800	3.800	-	-	-	-
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	3.800	3.800	-	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Modification Number / Title: 2 / Deployable TACAN Retrofit/ Refurbishment			
Models of Systems Affected: TRN-48				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: AN/TRN-48 TACAN</i>													
B Kits													
Recurring													
AN/TRN-48 TACAN:EQUIPMENT Group B (Active)	- / -	- / -	- / -	- / -	3 / 3.700	3 / 3.700	- / -	- / -	- / -	- / -	- / -	3 / 3.700	
AN/TRN-48 TACAN:EQUIPMENT Group B (Guard)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
AN/TRN-48 TACAN:EQUIPMENT Group B (Reserve)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / -	- / 3.700	- / 3.700	- / -	- / -	- / -	- / -	- / -	- / 3.700	
<i>Subtotal: AN/TRN-48 TACAN</i>	- / -	- / -	- / -	- / -	- / 3.700	- / 3.700	- / -	- / -	- / -	- / -	- / -	- / 3.700	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / -	- / 3.700	- / 3.700	- / -	- / -	- / -	- / -	- / -	- / 3.700	
Support (All Modification Items)													
GROUP B: TOTAL NONRECURRING	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
A&AS	- / -	- / -	- / -	- / -	- / 0.100	- / 0.100	- / -	- / -	- / -	- / -	- / -	- / 0.100	
<i>Subtotal: Support</i>	- / -	- / -	- / -	- / -	- / 0.100	- / 0.100	- / -	- / -	- / -	- / -	- / -	- / 0.100	
Installation													
<i>Modification Item 1 of 1: AN/TRN-48 TACAN</i>	- / -	- / -	- / -	3 / -	- / -	3 / -	- / -	- / -	- / -	- / -	- / -	3 / -	
<i>Subtotal: Installation</i>	- / -	- / -	- / -	3 / -	- / -	3 / -	- / -	- / -	- / -	- / -	- / -	3 / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	-	-	3.800	3.800	-	-	-	-	-	3.800	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 2 / Deployable TACAN Retrofit/ Refurbishment

Modification Item 1 of 1: AN/TRN-48 TACAN

Manufacturer Information

Manufacturer Name: TechFlow, Inc				Manufacturer Location: San Diego, CA			
Administrative Leadtime (in Months): 2				Production Leadtime (in Months): 3			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Dec 2016				
Delivery Dates			Mar 2017				

Installation Information

Method of Implementation: Contractor Facility

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	3 / -	- / -	3 / -	- / -	- / -	- / -	- / -	- / -	3 / -
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	3 / -	- / -	3 / -	- / -	- / -	- / -	- / -	- / -	3 / -

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot	
		Q1	Q2	Q3	Q4																											
In	0	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	0	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods						Modification Number / Title: 1 / National Airspace System (NAS) Mod 1		

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	1.519	-	1.519	7.435	3.861	5.814	5.918	-	24.547
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	1.519	-	1.519	7.435	3.861	5.814	5.918	-	24.547
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	1.519	-	1.519	7.435	3.861	5.814	5.918	-	24.547
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program, PE 0305137F Mods, P-3A NAS Mod 1, National Airspace System (NAS) Mod 1, is a new start. The DAAS System, also known as the Standard Terminal Automation Replacement System (STARS) was fielded in three different hardware configurations and three distinct software builds. This upgrade, establishes a standard system configuration and ensures continued system supportability and availability by upgrading current DAAS/STARS Gen 1 and Gen 2 locations to the DAAS/STARS Enhanced Local Integrated Tower Equipment (ELITE) or Gen 4 (G4) configuration, enabling them to operate with latest FAA/DoD software. Current DAAS/STARS Gen 1 and Gen 2 processors and associated network equipment have gone end of life. Configuration consolidation also reduces multiple, simultaneous efforts associated with system software development and test while reducing cost outlays.

FY17 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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	1.519	-	1.519	7.435	3.861	5.814	5.918
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	1.519	-	1.519	7.435	3.861	5.814	5.918

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / National Airspace System (NAS) Mod 1

Models of Systems Affected: NASMod-1	Modification Type: Capability Improvement	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Procurement												
<i>Modification Item 1 of 1:</i> DAAS G4 Retrofit												
B Kits												
Recurring												
DAAS G4 Retrofit:EQUIPMENT Group B (Active)	- / -	- / -	- / -	4 / 1.469 ⁽¹⁾	- / -	4 / 1.469	2 / 7.210	1 / 3.711	1 / 5.739	1 / 5.842	- / -	9 / 23.971
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 1.469	- / -	- / 1.469	- / 7.210	- / 3.711	- / 5.739	- / 5.842	- / -	- / 23.971
<i>Subtotal: DAAS G4 Retrofit</i>	- / -	- / -	- / -	- / 1.469	- / -	- / 1.469	- / 7.210	- / 3.711	- / 5.739	- / 5.842	- / -	- / 23.971
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / 1.469	- / -	- / 1.469	- / 7.210	- / 3.711	- / 5.739	- / 5.842	- / -	- / 23.971
Installation												
<i>Modification Item 1 of 1:</i> DAAS G4 Retrofit												
DAAS G4 Retrofit	- / -	- / -	- / -	1 / 0.050	- / -	1 / 0.050	4 / 0.225	2 / 0.150	1 / 0.075	1 / 0.076	- / -	9 / 0.576
<i>Subtotal: Installation</i>	- / -	- / -	- / -	1 / 0.050	- / -	1 / 0.050	4 / 0.225	2 / 0.150	1 / 0.075	1 / 0.076	- / -	9 / 0.576
Total												
Total Cost (Procurement + Support + Installation)	-	-	-	1.519	-	1.519	7.435	3.861	5.814	5.918	-	24.547

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / National Airspace System (NAS) Mod 1

Modification Item 1 of 1: DAAS G4 Retrofit

Manufacturer Information

Manufacturer Name: Raytheon	Manufacturer Location: Marlborough, MA
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 6

Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021
Delivery Dates			Jul 2017	Jul 2018	Jul 2019	Jul 2020	Jul 2021

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	1 / 0.050	- / -	1 / 0.050	3 / 0.150	- / -	- / -	- / -	- / -	4 / 0.200
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.075	1 / 0.075	- / -	- / -	- / -	2 / 0.150
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.075	- / -	- / -	- / -	1 / 0.075
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.075	- / -	- / -	1 / 0.075
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.076	- / -	1 / 0.076
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	1 / 0.050	- / -	1 / 0.050	4 / 0.225	2 / 0.150	1 / 0.075	1 / 0.076	- / -	9 / 0.576

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4																										
In	0	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	-	-	1	-	-	-	1	-	-	-	1	-	-
Out	0	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	-	-	1	-	-	-	1	-	-	-	1	-	-

Footnotes:

(1) Unit cost in FY17 is lower than unit cost in FY18 through FY21 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 to FY21.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force														Date: February 2016					
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)					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Radar																				
Radar Reliability	A		-	-	-	-	-	-	-	-	6.850	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	6.850	-	-	-	-	-	-	-	-	-
Subtotal: Radar			-	-	-	-	-	-	-	-	6.850	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	6.850	-	-	-	-	-	-	-	-	-

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

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force															Date: February 2016				
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)					

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
COBRA DANE Radar Mod / COBRA DANE Radar Mod			-	-	-	-	-	-	-	-	0.150	-	-	0.100	-	-	-	-	-	0.100
<i>Secondary Distribution</i>																				
AF				-	-	-	-	-	-	-	0.150			0.100			-	-		0.100
P-3A BMEWS Modification / BMEWS Modification			-	-	-			3.565	-	-	0.100	-	-	0.100	-	-	-	-	-	0.100
<i>Secondary Distribution</i>																				
AF				-	-			3.565	-	-	0.100			0.100			-	-		0.100
Total			-	-	0.000	-	-	3.565	-	-	0.250	-	-	0.200	-	-	-	-	-	0.200
Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
COBRA DANE Radar Mod / COBRA DANE Radar Mod			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.250
<i>Secondary Distribution</i>																				
AF				-	-			-	-	-			-	-	-			-	-	
P-3A BMEWS Modification / BMEWS Modification			-	-	25.436	-	-	22.859	-	-	23.262	-	-	23.681	-	-	-	-	-	99.003
<i>Secondary Distribution</i>																				
AF				-	25.436			22.859			23.262			23.681			-	-		-
Total			-	-	25.436	-	-	22.859	-	-	23.262	-	-	23.681	-	-	-	-	-	99.253

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 DANE Radar Mod	NA	Reliability & Maintainability
P-3A BMEWS Modification / BMEWS Modification	NA	Reliability & Maintainability

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016	
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods						Modification Number / Title: 1 / Mod HEMP	

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	49.000	18.943	-	18.943	-	-	-	-	-	67.943
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	49.000	18.943	-	18.943	-	-	-	-	-	67.943
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	49.000	18.943	-	18.943	-	-	-	-	-	67.943

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

High Altitude Electromagnetic Pulse (HEMP) Protection Program: HEMP Protection modification implements OSD, CJCS & USSTRATCOM HEMP survivability requirements for all Ground Based Radars (GBRs). GBR upgrades are advocated by the USSTRATCOM/CC and downward directed and funded by the DepSecDef. Upgrades for various GBR complexes have been performed and are planned to be completed as part of HEMP modernization program for critical Air Force Space Command sites. This program will install and upgrade HEMP protection of main radar, power plant emergency power, and SATCOM antennas. Once HEMP protection is installed and upgraded, there will be Verification tests conducted IAW MIL-STD-188-125 as the basis-of certification by USSTRATCOM. Once Certification is granted, the annual Integrated Nuclear Survivability and Endurability Report (INSER) will be updated to show survivability status and reported to the JCS and Congress.

Milestone/Development Status

FY17 High-Altitude Electromagnetic Pulse (HEMP) Protection Program

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	49.000	18.943	-	18.943	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	49.000	18.943	-	18.943	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Modification Number / Title: 1 / Mod HEMP			
Models of Systems Affected: NA				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: HEMP</i>													
A Kits													
Recurring													
HEMP:INSTALL KITS Group A (Active)	- / -	- / -	- / 148.900	- / 18.843	- / -	- / 18.843	- / -	- / -	- / -	- / -	- / -	- / 67.743	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 148.900	- / 18.843	- / -	- / 18.843	- / -	- / -	- / -	- / -	- / -	- / 67.743	
<i>Subtotal: HEMP</i>	- / -	- / -	- / 148.900	- / 18.843	- / -	- / 18.843	- / -	- / -	- / -	- / -	- / -	- / 67.743	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 148.900	- / 18.843	- / -	- / 18.843	- / -	- / -	- / -	- / -	- / -	- / 67.743	
Support (All Modification Items)													
PMA - Other Gov't Costs	- / -	- / -	- / 10.100	- / 10.100	- / -	- / 10.100	- / -	- / -	- / -	- / -	- / -	- / 10.200	
<i>Subtotal: Support</i>	- / -	- / -	- / 10.100	- / 10.100	- / -	- / 10.100	- / -	- / -	- / -	- / -	- / -	- / 10.200	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	0.000	-	49.000	18.943	-	18.943	-	-	-	-	-	67.943	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / Mod HEMP
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Modification Item 1 of 1: HEMP

Manufacturer Information

Manufacturer Name: N/A	Manufacturer Location: N/A
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Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 71
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods			Modification Number / Title: 2 / BMEWS DP/SP Suite Replacement				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	11.255	26.361	9.858	17.486	-	17.486	-	-	-	-	-	64.960
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	11.255	26.361	9.858	17.486	-	17.486	-	-	-	-	-	64.960
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	11.255	26.361	9.858	17.486	-	17.486	-	-	-	-	-	64.960

(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)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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. This effort is funded in PE0305909F.

DATA PROCESSOR/SIGNAL PROCESSOR (DP/SP) SUITE REPLACEMENT. (formerly BMEWS Evolutionary SGI Replacement Modification Program) replaces obsolete or unsupported system components and subsystems to address evolving space and missile threats. The BMEWS 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. Without these modifications there is a high risk that Information Assurance issues and equipment failures will cause unacceptable mission downtime in order to troubleshoot and repair. FY17 will fund replacement of unsupported mission and sustainment equipment (with any required initial spares) to include, but not limited to, Display and Signal Processors, associated processors, and display hardware.

Milestone/Development Status

N/A

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.361	9.858	17.486	-	17.486	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.361	9.858	17.486	-	17.486	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Modification Number / Title: 2 / BMEWS DP/SP Suite Replacement			
Models of Systems Affected: Raytheon				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
Modification Item 1 of 2: DP/SP EQUIPMENT													
B Kits													
Recurring													
DP/SP EQUIPMENT:EQUIPMENT Group B (Active)	1 / 10.255	- / -	1 / 9.758	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 20.013	
<i>Subtotal: Recurring</i>	- / 10.255	- / -	- / 9.758	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 20.013	
<i>Subtotal: DP/SP EQUIPMENT</i>	- / 10.255	- / -	- / 9.758	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 20.013	
Modification Item 2 of 2: DP/SP KITS													
A Kits													
Recurring													
DP/SP KITS:INSTALL KITS Group A (Active)	- / -	1 / 0.550	- / -	1 / 0.550	- / -	1 / 0.550	- / -	- / -	- / -	- / -	- / -	2 / 1.100	
<i>Subtotal: Recurring</i>	- / -	- / 0.550	- / -	- / 0.550	- / -	- / 0.550	- / -	- / -	- / -	- / -	- / -	- / 1.100	
<i>Subtotal: DP/SP KITS</i>	- / -	- / 0.550	- / -	- / 0.550	- / -	- / 0.550	- / -	- / -	- / -	- / -	- / -	- / 1.100	
<i>Subtotal: Procurement, All Modification Items</i>	- / 10.255	- / 0.550	- / 9.758	- / 0.550	- / -	- / 0.550	- / -	- / -	- / -	- / -	- / -	- / 21.113	
Support (All Modification Items)													
PMA - Contractor Services	- / 1.000	- / 0.600	- / 0.100	- / 0.400	- / -	- / 0.400	- / -	- / -	- / -	- / -	- / -	- / 2.100	
<i>Subtotal: Support</i>	- / 1.000	- / 0.600	- / 0.100	- / 0.400	- / -	- / 0.400	- / -	- / -	- / -	- / -	- / -	- / 2.100	
Installation													
Modification Item 2 of 2: DP/SP KITS													
<i>Subtotal: Installation</i>	- / -	1 / 25.211	- / -	1 / 16.536	- / -	1 / 16.536	- / -	- / -	- / -	- / -	- / -	2 / 41.747	
<i>Subtotal: Installation</i>	- / -	1 / 25.211	- / -	1 / 16.536	- / -	1 / 16.536	- / -	- / -	- / -	- / -	- / -	2 / 41.747	
Total													
Total Cost (Procurement + Support + Installation)	11.255	26.361	9.858	17.486	-	17.486	-	-	-	-	-	64.960	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 2 / BMEWS DP/SP Suite Replacement
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Modification Item 1 of 2: DP/SP EQUIPMENT

Manufacturer Information

Manufacturer Name: Raytheon	Manufacturer Location: Boston, MA
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Administrative Leadtime (in Months): 4	Production Leadtime (in Months): 3
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Feb 2015		Mar 2017				
Delivery Dates	May 2015		Jun 2017				

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 2 / BMEWS DP/SP Suite Replacement

Modification Item 2 of 2: DP/SP KITS

Manufacturer Information

Manufacturer Name: Raytheon				Manufacturer Location: Boston, MA			
Administrative Leadtime (in Months): 4				Production Leadtime (in Months): 26			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates	Feb 2015		Mar 2017				
Delivery Dates	Apr 2017		May 2019				

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2015	- / -	1 / 25.211	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 25.211
FY 2016	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2017	- / -	- / -	- / -	1 / 16.536	- / -	1 / 16.536	- / -	- / -	- / -	- / -	- / -	1 / 16.536
FY 2018	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2019	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2021	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	1 / 25.211	- / -	1 / 16.536	- / -	1 / 16.536	- / -	- / -	- / -	- / -	- / -	2 / 41.747

Installation Schedule

	PYS	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				TC	Tot
		Q1	Q2	Q3	Q4																										
In	0	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Out	0	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods						Modification Number / Title: 1 / PAVE PAWS Block 00 Update			

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	4.690	-	4.690	0.600	-	-	-	-	5.290
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	4.690	-	4.690	0.600	-	-	-	-	5.290
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	4.690	-	4.690	0.600	-	-	-	-	5.290

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Formerly part of SPACE MOD SPACE mod BPAC 836790 FY15 and prior in OPAF and appropriated in Space Procurement Air Force in FY16. PAVE PHASED ARRAY WARNING SYSTEM (PAVE PAWS): PAVE PAWS radar 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. FY17 will fund replacement of unsupportable mission and sustainment equipment to include (with any required initial spares), but not limited to, processing equipment, power supplies, beam steering/shaping units, test sets, and analysis hardware.

Milestone/Development Status

NA

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	4.690	-	4.690	0.600	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	4.690	-	4.690	0.600	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Modification Number / Title: 1 / PAVE PAWS Block 00 Update			
Models of Systems Affected: NA				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0305909F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: PAVE PAWS</i>													
B Kits													
Recurring													
PAVE PAWS:EQUIPMENT Group B (Active)	- / -	- / -	- / -	1 / 4.590	- / -	1 / 4.590	- / -	- / -	- / -	- / -	- / -	1 / 4.590	
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 4.590	- / -	- / 4.590	- / -	- / -	- / -	- / -	- / -	- / 4.590	
<i>Subtotal: PAVE PAWS</i>	- / -	- / -	- / -	- / 4.590	- / -	- / 4.590	- / -	- / -	- / -	- / -	- / -	- / 4.590	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / 4.590	- / -	- / 4.590	- / -	- / -	- / -	- / -	- / -	- / 4.590	
Support (All Modification Items)													
PMA - Contractor Services	- / -	- / -	- / -	- / 0.100	- / -	- / 0.100	- / 0.600	- / -	- / -	- / -	- / -	- / 0.700	
<i>Subtotal: Support</i>	- / -	- / -	- / -	- / 0.100	- / -	- / 0.100	- / 0.600	- / -	- / -	- / -	- / -	- / 0.700	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	-	4.690	-	4.690	0.600	-	-	-	-	5.290	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 1 / PAVE PAWS Block 00 Update
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Modification Item 1 of 1: PAVE PAWS

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: Colorado Springs, CO
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Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 15
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Jan 2017				
Delivery Dates			Apr 2018				

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 1
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UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods				Modification Number / Title: 2 / P-3A PARCS Modification (formerly PARCS PARSS)				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	0.750	-	0.750	8.763	9.102	8.148	8.294	-	35.057
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	-	0.750	-	0.750	8.763	9.102	8.148	8.294	-	35.057
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	0.750	-	0.750	8.763	9.102	8.148	8.294	-	35.057

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Formerly part of Space Mods Space mod BPAC 836790 in OPAF for FY15 and prior, appropriated in Space Procurement Air Force in FY16. Perimeter Acquisition Radar Attack Characterization System (PARCS) Program Office plans for and procures replacement components for unsupported, unobtainable, and unreliable system components. PARCS equipment is composed of custom built components that became obsolete in the 1980's. Most spare parts for this system are no longer available and have no logistics tail. Without replacements there is a high risk of mission failure and/or unacceptable downtime for repair. To best ensure operational availability, replacement projects are performed in phases targeting the highest risk components of the subsystems.

FY17 will fund ongoing program management administrative costs supporting PARCS modification efforts funded in Space Procurement Air Force in FY16.

Milestone/Development Status

n/a

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	0.750	-	0.750	8.763	9.102	8.148	8.294
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	0.750	-	0.750	8.763	9.102	8.148	8.294

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Modification Number / Title: 2 / P-3A PARCS Modification (formerly PARCS PARSS)			
Models of Systems Affected: Exelis				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>				
Procurement													
<i>Modification Item 1 of 1:</i> Modification													
B Kits													
Recurring													
Modification:EQUIPMENT Group B (Active)													
	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.102	- 17.148	- 17.294	- / -	- 131.057	
<i>Subtotal: Recurring</i>													
	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.102	- 17.148	- 17.294	- / -	- 131.057	
<i>Subtotal: Modification</i>													
	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.102	- 17.148	- 17.294	- / -	- 131.057	
<i>Subtotal: Procurement, All Modification Items</i>													
	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.102	- 17.148	- 17.294	- / -	- 131.057	
Support (All Modification Items)													
PMA - Contractor Services													
	- / -	- / -	- / -	- 10.750	- / -	- 10.750	- 10.250	- 11.000	- 11.000	- 11.000	- / -	- 14.000	
<i>Subtotal: Support</i>													
	- / -	- / -	- / -	- 10.750	- / -	- 10.750	- 10.250	- 11.000	- 11.000	- 11.000	- / -	- 14.000	
Installation													
<i>Subtotal: Installation</i>													
	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)													
	0.000	-	-	0.750	-	0.750	8.763	9.102	8.148	8.294	-	35.057	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force					Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8			P-1 Line Item Number / Title: 838010 / Comm Elect Mods		Modification Number / Title: 2 / P-3A PARCS Modification (formerly PARCS PARSS)		
Modification Item 1 of 1: Modification							
Manufacturer Information							
Manufacturer Name: N/A				Manufacturer Location: N/A			
Administrative Leadtime (in Months):				Production Leadtime (in Months):			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): Org/Intermediate					Installation Quantity: 0		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods				Modification Number / Title: 3 / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	-	-	0.300	-	0.300	8.913	9.103	8.148	8.295	-	34.759
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	-	-	0.300	-	0.300	8.913	9.103	8.148	8.295	-	34.759
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	-	-	0.300	-	0.300	8.913	9.103	8.148	8.295	-	34.759
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Formerly part of SPACE MOD SPACE mod BPAC 836790 FY15 and prior in OPAF and appropriated in Space Procurement Air Force in FY16. PAVE PHASED ARRAY WARNING SYSTEM (PAVE PAWS) radar 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. PAVE PAWS MODIFICATION (formerly PAVE PAWS Front-End Replacement) replaces obsolete or unsupportable system components and subsystems to address evolving space and missile threats. 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. FY17 will fund ongoing program management administrative costs supporting PAVE PAWS modification efforts funded in Space Procurement Air Force in FY16.

Milestone/Development Status

N/A

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	0.300	-	0.300	8.913	9.103	8.148	8.295
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	0.300	-	0.300	8.913	9.103	8.148	8.295

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8	P-1 Line Item Number / Title: 838010 / Comm Elect Mods	Modification Number / Title: 3 / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)

Models of Systems Affected: NA	Modification Type: Reliability & Maintainability	Related RDT&E PEs:
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Procurement												
<i>Modification Item 1 of 1:</i> PP Modification												
B Kits												
Recurring												
PP Modification:EQUIPMENT Group B (Active)	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.703	- 17.748	- 17.895	- / -	- / 32.859
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.703	- 17.748	- 17.895	- / -	- / 32.859
<i>Subtotal: PP Modification</i>	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.703	- 17.748	- 17.895	- / -	- / 32.859
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / -	- / -	- / -	- 18.513	- 18.703	- 17.748	- 17.895	- / -	- / 32.859
Support (All Modification Items)												
PMA - Contractor Services	- / -	- / -	- / -	- 10.300	- / -	- 10.300	- 10.400	- 10.400	- 10.400	- 10.400	- / -	- / 11.900
<i>Subtotal: Support</i>	- / -	- / -	- / -	- 10.300	- / -	- 10.300	- 10.400	- 10.400	- 10.400	- 10.400	- / -	- / 11.900
Installation												
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	0.000	-	-	0.300	-	0.300	8.913	9.103	8.148	8.295	-	34.759

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force					Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8			P-1 Line Item Number / Title: 838010 / Comm Elect Mods		Modification Number / Title: 3 / P-3A PAVE PAWS Modification (formerly PAVE PAWS Front End)		
Modification Item 1 of 1: PP Modification							
Manufacturer Information							
Manufacturer Name: Exelis/Harris				Manufacturer Location: Colorado Springs			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 6			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): Org/Intermediate					Installation Quantity: 0		

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8				P-1 Line Item Number / Title: 838010 / Comm Elect Mods						Modification Number / Title: 4 / PARCS Block 00 Update			

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	-	4.240	-	4.240	0.750	-	-	-	-	4.990
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	-	4.240	-	4.240	0.750	-	-	-	-	4.990
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	-	4.240	-	4.240	0.750	-	-	-	-	4.990

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Formerly part of Space Mods Space mod BPAC 836790 in OPAF for FY15 and prior, appropriated in Space Procurement Air Force in FY16. Perimeter Acquisition Radar Attack Characterization System (PARCS) Program Office plans for and procures replacement components for unsupported, unobtainable, and unreliable system components. PARCS equipment is composed of custom built components that became obsolete in the 1980's. Most spare parts for this system are no longer available and have no logistics tail. Without replacements there is a high risk of mission failure and/or unacceptable downtime for repair. To best ensure operational availability, replacement projects are performed in phases targeting the highest risk components of the subsystems.

FY17 funds will be used to modify the PARCS system for the replacement of unsupported and unreliable components to include (with any required initial spares), but not limited to, the PARCS Mission Data Processor, Radar Transmitter, Antenna Group, Exciter Group, Radio Frequency Signal Processor Group, Performance Monitor Group, Radar Return Generator Group, Digital Data Group, and Radar Controller Group.

Milestone/Development Status

N/A

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	4.240	-	4.240	0.750	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	4.240	-	4.240	0.750	-	-	-

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8					P-1 Line Item Number / Title: 838010 / Comm Elect Mods					Modification Number / Title: 4 / PARCS Block 00 Update			
Models of Systems Affected: Exelis				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>				
Procurement													
<i>Modification Item 1 of 1: PARCS</i>													
A Kits													
Recurring													
PARCS:INSTALL KITS Group A (Active)													
	- / -	- / -	- / -	1 / 0.100	- / -	1 / 0.100	- / -	- / -	- / -	- / -	- / -	1 / 0.100	
<i>Subtotal: Recurring</i>													
	- / -	- / -	- / -	- / 0.100	- / -	- / 0.100	- / -	- / -	- / -	- / -	- / -	- / 0.100	
B Kits													
Recurring													
PARCS:EQUIPMENT Group B (Active)													
	- / -	- / -	- / -	1 / 3.890	- / -	1 / 3.890	- / -	- / -	- / -	- / -	- / -	1 / 3.890	
<i>Subtotal: Recurring</i>													
	- / -	- / -	- / -	- / 3.890	- / -	- / 3.890	- / -	- / -	- / -	- / -	- / -	- / 3.890	
<i>Subtotal: PARCS</i>													
	- / -	- / -	- / -	- / 3.990	- / -	- / 3.990	- / -	- / -	- / -	- / -	- / -	- / 3.990	
<i>Subtotal: Procurement, All Modification Items</i>													
	- / -	- / -	- / -	- / 3.990	- / -	- / 3.990	- / -	- / -	- / -	- / -	- / -	- / 3.990	
Support (All Modification Items)													
PMA - Contractor Services													
	- / -	- / -	- / -	- / 0.250	- / -	- / 0.250	- / 0.750	- / -	- / -	- / -	- / -	- / 1.000	
<i>Subtotal: Support</i>													
	- / -	- / -	- / -	- / 0.250	- / -	- / 0.250	- / 0.750	- / -	- / -	- / -	- / -	- / 1.000	
Installation													
<i>Subtotal: Installation</i>													
	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)													
	-	-	-	4.240	-	4.240	0.750	-	-	-	-	4.990	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2017 Air Force					Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8			P-1 Line Item Number / Title: 838010 / Comm Elect Mods		Modification Number / Title: 4 / PARCS Block 00 Update		
<i>Modification Item 1 of 1:</i> PARCS							
Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (<i>in Months</i>): 3				Production Leadtime (<i>in Months</i>): 15			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates			Jan 2017				
Delivery Dates			Apr 2018				
Installation Information							
Method of Implementation (Organic): Org/Intermediate					Installation Quantity: 1		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 03 / 8 **P-1 Line Item Number / Title:** 838010 / Comm Elect Mods **Aggregated Items Title:** Shared Early Warning (SEW)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Shared Early Warning Systems (SEWS) (PE 0308699F)	A		0.574	1	0.574	0.329	1	0.329	0.220	1	0.220	0.403	1	0.403	-	-	-	0.403	1	0.403
<i>Secondary Distribution</i>																				
AF			-	-	-	-	1	0.329	-	1	0.220	-	1	0.403	-	-	-	-	1	0.403
Subtotal: Uncategorized			-	-	0.574	-	-	0.329	-	-	0.220	-	-	0.403	-	-	-	-	-	0.403
Total			-	-	0.574	-	-	0.329	-	-	0.220	-	-	0.403	-	-	-	-	-	0.403

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Shared Early Warning Systems (SEWS) (PE 0308699F)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	1	0.388	-	1	0.348	-	1	0.354	-	1	0.360	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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	P-1 Line Item Number / Title: 842140 / Night Vision Goggles
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	13.342	5.950	-	-	-	-	-	-	-	-	19.292
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	13.342	5.950	-	-	-	-	-	-	-	-	19.292
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	13.342	5.950	-	-	-	-	-	-	-	-	19.292

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY15 funding includes \$.765M appropriated for Overseas Contingency Operations.
 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, 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.

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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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	P-1 Line Item Number / Title: 842140 / Night Vision Goggles
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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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 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: No FY17 funds requested. All funding and tasks from FY17-FY21 have been moved to Project 842990, Items Less than \$5 Million.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	1,545	195	-	-	-	-	-	-	-
	Total Obligation Authority	9.133	4.995	-	-	-	-	-	-	-
AFNG	Quantity	706	184	-	-	-	-	-	-	-
	Total Obligation Authority	3.076	0.716	-	-	-	-	-	-	-
AFR	Quantity	248	63	-	-	-	-	-	-	-
	Total Obligation Authority	1.133	0.239	-	-	-	-	-	-	-
Total: Secondary Distribution	Quantity	2,499	442	-	-	-	-	-	-	-
	Total Obligation Authority	13.342	5.950	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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	P-1 Line Item Number / Title: 842140 / Night Vision Goggles
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Night Vision Goggles			- / -	- / 13.342	- / 5.950	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 13.342	- / 5.950	- / -	- / -	- / -

*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:
 No FY17 funds are being requested. All funding and tasks from FY17-FY21 have been moved to Project 842990, Items Less than \$5 Million

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 2						P-1 Line Item Number / Title: 842140 / Night Vision Goggles						Aggregated Items Title: Night Vision Goggles								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
GROUNDCREW GOGGLES	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GROUNDCREW GOGGLE (AN/ PVS-14)	A		-	-	-	0.003	1,890	5.670	0.003	282	0.850	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		1,134	3.402		52	0.158		-	-	-		-	-		-
AFNG			-	-	-		567	1.701		171	0.515		-	-	-		-	-		-
AFR			-	-	-		189	0.567		59	0.177		-	-	-		-	-		-
GROUNDCREW GOGGLE (AN/ PVS-15)	A		-	-	-	0.010	73	0.711	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		51	0.497		-	-		-	-	-		-	-		-
AFNG			-	-	-		21	0.204		-	-		-	-	-		-	-		-
AFR			-	-	-		1	0.010		-	-		-	-	-		-	-		-
FUSION GOGGLE- ENHANCED (FGE)	A		-	-	-	0.038	63	2.409	0.038	115	4.381	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		63	2.409		115	4.381		-	-	-		-	-		-
AIRCREW GOGGLES	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AIRCREW GOGGLE AN/AVS-9 (F4949G-TG)	A		-	-	-	0.009	433	3.897	-	-	-	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		278	2.502		-	-		-	-	-		-	-		-
AFNG			-	-	-		102	0.918		-	-		-	-	-		-	-		-
AFR			-	-	-		53	0.477		-	-		-	-	-		-	-		-
TEST SETS	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TEST SET, INFRARED VIEWER (ANV-126A)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TEST SET, TCTO KIT (ANV-126A-UGF)	A		-	-	-	0.016	40	0.632	0.015	45	0.696	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-		19	0.300		28	0.433		-	-	-		-	-		-
AFNG			-	-	-		16	0.253		13	0.201		-	-	-		-	-		-
AFR			-	-	-		5	0.079		4	0.062		-	-	-		-	-		-
PMA Other Government Cost	A		-	-	-	-	-	0.023	-	-	0.023	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 2 **P-1 Line Item Number / Title:** 842140 / Night Vision Goggles **Aggregated Items Title:** Night Vision Goggles

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				-	-		-	0.023		-	0.023		-	-		-	-		-	
Subtotal: Uncategorized			-	-	-	-	-	13.342	-	-	5.950	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	13.342	-	-	5.950	-	-	-	-	-	-	-	-	

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

Remarks:

No FY17 funds are being requested. All funding and tasks from FY17-FY21 have been moved to Project 842990, Items Less than \$5 Million

Guardian Angel FG-E unit cost is approximately \$38,000 per goggle and does not include support items.

FY15 funding total includes \$.765M for Overseas Contingency Operations to procure 251 AN/PVS-14s.

FY16 funding total includes \$3.580M for Overseas Contingency Operations to procure 76 FGE's.

PMA - Other Government Cost consists of travel (\$22,000).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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	P-1 Line Item Number / Title: 842990 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604706F
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Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	4.973	31.209	73.030	54.416	-	54.416	52.682	48.280	49.326	46.336	-	360.252
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	4.973	31.209	73.030	54.416	-	54.416	52.682	48.280	49.326	46.336	-	360.252
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	4.973	31.209	73.030	54.416	-	54.416	52.682	48.280	49.326	46.336	-	360.252

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program provides a wide variety of base support and safety of flight items for warfighters with worldwide application.

Procures safety and rescue equipment, developed in Program Element (PE) 0604706F, Life Support Systems, 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 protective gear, laser eye protection, personnel locator beacons, nuclear flash blindness devices, personnel parachutes, ejection seats/equipment, survival radio test sets, life rafts, life preservers, anti-exposure coveralls, and other air/ground crew equipment.

Guardian Angel Family of Systems:

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 rescue equipment, information management systems, rescue craft 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. 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. 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. 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.

Guardian Angel Enhanced Night Vision Systems: 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. 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. All funding and tasks from FY17-FY21 have been moved from Project 842140 Night Vision Goggles to Project 842990, Items Less than \$5 Million.

Special Tactics/Combat Control Battlefield Airmen program funds Air Force standardized equipment within the overarching Battlefield Airman Modernization program for Special Tactics combat controllers, pararescue personnel, combat weather operators and tactical air control parties to

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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		P-1 Line Item Number / Title: 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: 0604706F
Line Item MDAP/MAIS Code: N/A		
<p>perform their Air Force Special Operations Command mission. Funding for this effort is in program element 0408011F. FY17 funds purchase of new DoD standardized Military Freefall Parachutes for USAF Special Tactics units.</p> <p>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.</p> <p>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.</p> <p>Funding for this exhibit contained in Program Elements (PEs) 0702833F, 0207227F, 0202834F, and 0207588F.</p> <p>Ground crew Goggles:</p> <p>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.</p> <p>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.</p> <p>Aircrew Goggles:</p> <p>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.</p> <p>Test Sets:</p> <p>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.</p> <p>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.</p> <p>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.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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	P-1 Line Item Number / Title: 842990 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604706F
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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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	2,718	14,803	2,625	-	2,625	70	142	137	206
	Total Obligation Authority	31.209	73.030	53.789	-	53.789	52.143	47.766	48.809	45.785
AFNG	Quantity	-	-	71	-	71	33	63	64	100
	Total Obligation Authority	-	-	0.499	-	0.499	0.425	0.372	0.406	0.416
AFR	Quantity	-	-	21	-	21	9	23	19	33
	Total Obligation Authority	-	-	0.128	-	0.128	0.114	0.142	0.111	0.135
Total: Secondary Distribution	Quantity	2,718	14,803	2,717	-	2,717	112	228	220	339
	Total Obligation Authority	31.209	73.030	54.416	-	54.416	52.682	48.280	49.326	46.336

Justification:
 FY17 procurement dollars procure Aircrew Flight Equipment, Life Support Systems, and Guardian Angel equipment.

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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 3: Depot Plant+Mtrls Handling Eq	P-1 Line Item Number / Title: 843050 / Mechanized Material Handling Equip
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	7.670	7.249	7.344	-	7.344	8.140	8.222	8.371	8.522	-	55.518
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	7.670	7.249	7.344	-	7.344	8.140	8.222	8.371	8.522	-	55.518
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	7.670	7.249	7.344	-	7.344	8.140	8.222	8.371	8.522	-	55.518

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Mechanized Materiel Handling Equipment line provides funding for Mechanized Materiel 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 materiel 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; 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, baggage, and freight to reduce pipeline time and to provide Air Force capability to respond to crises and threats whenever they occur in the world.

The FY2016 funding request was reduced by \$0.077 million to account for the availability of prior execution balances.

Program elements associated with this P-1 Line are 0202834F, 0702834F, 0802834F, 0402834F, 0502834F, 0502844F, 0207597F, and 0401221F.

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 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	16	23	25	-	25	-	-	-	-
	Total Obligation Authority	4.388	6.419	6.144	-	6.144	-	-	-	-
AFNG	Quantity	8	2	3	-	3	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 3: Depot Plant+Mtrls Handling Eq	P-1 Line Item Number / Title: 843050 / Mechanized Material Handling Equip
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
	Total Obligation Authority	3.282	0.539	1.050	-	1.050	-	-	-	-
AFR	Quantity	-	1	1	-	1	-	-	-	-
	Total Obligation Authority	-	0.291	0.150	-	0.150	-	-	-	-
Total:	Quantity	24	26	29	-	29	-	-	-	-
Secondary Distribution	Total Obligation Authority	7.670	7.249	7.344	-	7.344	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 3: Depot Plant+Mtrls Handling Eq

P-1 Line Item Number / Title:
843050 / Mechanized Material Handling Equip

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Mechanized Material Handling Equip			- / -	- / 17.670	- / 17.249	- / 17.344	- / -	- / 17.344
P-40	Total Gross/Weapon System Cost			- / -	- / 17.670	- / 17.249	- / 17.344	- / -	- / 17.344

*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:
FY17 procurement funds MMHS/SAS equipment which 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 maintenance, and transportation facilities. Also provides critical support for mission readiness of F-16 realignment, and F-22, F-35, and KC-46A beddown of assets through the use of MMHS/SAS equipment.

MMHE is to be purchased in the following quantities: 2 conveyors, 6 high density storage systems, 1 narrow aisle equipment replacement, 1 receiving, storage and distribution system, 19 storage aid systems.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 3 **P-1 Line Item Number / Title:** 843050 / Mechanized Material Handling Equip **Aggregated Items Title:** Mechanized Material Handling Equip

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BRIDGE CRANE	A		-	-	-	-	-	-	0.300	1	0.300	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-		1	0.300		-	-	-	-	-	-	-	
CONVEYOR	A		-	-	-	0.334	2	0.667	0.457	1	0.457	0.589	2	1.178	-	-	-	0.589	2	1.178
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.524		1	0.457		2	1.178		-	-		2	1.178
AFNG			-	-	-		1	0.143		-	-		-	-		-	-		-	-
HIGH DENSITY STORAGE SYSTEM	A		-	-	-	0.497	4	1.986	0.233	5	1.166	0.230	6	1.379	-	-	-	0.230	6	1.379
<i>Secondary Distribution</i>																				
AF			-	-	-		3	1.157		4	0.875		5	1.079		-	-		5	1.079
AFNG			-	-	-		1	0.829		-	-		1	0.300		-	-		1	0.300
AFR			-	-	-		-	-		1	0.291		-	-		-	-		-	-
NARROW AISLE EQUIPMENT REPLACEMENT	A		-	-	-	0.120	1	0.120	-	-	-	0.200	1	0.200	-	-	-	0.200	1	0.200
<i>Secondary Distribution</i>																				
AF			-	-	-		1	0.120		-	-		1	0.200		-	-		1	0.200
RECEIVING, STORAGE & DISTRIBUTION SYSTEM	A		-	-	-	0.319	2	0.638	-	-	-	0.621	1	0.621	-	-	-	0.621	1	0.621
<i>Secondary Distribution</i>																				
AF			-	-	-		2	0.638		-	-		1	0.621		-	-		1	0.621
STORAGE AIDS SYSTEM	A		-	-	-	0.284	15	4.259	0.280	19	5.326	0.209	19	3.966	-	-	-	0.209	19	3.966
<i>Secondary Distribution</i>																				
AF			-	-	-		9	1.949		17	4.787		16	3.066		-	-		16	3.066
AFNG			-	-	-		6	2.310		2	0.539		2	0.750		-	-		2	0.750
AFR			-	-	-		-	-		-	-		1	0.150		-	-		1	0.150
Subtotal: Uncategorized			-	-	-	-	-	7.670	-	-	7.249	-	-	7.344	-	-	-	-	-	7.344
Total			-	-	-	-	-	7.670	-	-	7.249	-	-	7.344	-	-	-	-	-	7.344

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 845010 / Base Procured Equipment
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	16.155	13.595	6.852	-	6.852	9.671	10.017	10.211	10.401	-	76.902
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	16.155	13.595	6.852	-	6.852	9.671	10.017	10.211	10.401	-	76.902
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	16.155	13.595	6.852	-	6.852	9.671	10.017	10.211	10.401	-	76.902

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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, 0502844F, 0702834F, 0802834F, 0804721F, 0804731F, 0804743F, 0804752F, 0808534F, 0901212F

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
845010 / Base Procured 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Base Procured Equipment			- / -	- / 16.155	- / 13.595	- / 6.852	- / -	- / 6.852
P-40	Total Gross/Weapon System Cost			- / -	- / 16.155	- / 13.595	- / 6.852	- / -	- / 6.852

*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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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 5 **P-1 Line Item Number / Title:** 845010 / Base Procured Equipment **Aggregated Items Title:** Base Procured Equipment

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BASE PROCURED EQUIPMENT	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF CIVIL ENGR SPT AGENCY	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AF SPACE CMD	A		-	-	-	-	-	-	-	1.590	-	-	-	-	-	-	-	-	-	-
AIR COMBAT CMD	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AIR EDUCATION & TRAINING CMD	A		-	-	-	-	-	7.841	-	-	7.555	-	-	2.788	-	-	-	-	-	2.788
PACIFIC AIR FORCES	A		-	-	-	-	-	2.030	-	-	-	-	-	-	-	-	-	-	-	-
US AIR FORCES EUROPE	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
US AIR FORCE ACADEMY	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AIR FORCE MATERIEL CMD	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCCIE	A		-	-	-	-	-	6.284	-	-	4.450	-	-	3.998	-	-	-	-	-	3.998
1) PCCIE PMA	A		-	-	-	-	-	-	-	-	-	-	-	0.066	-	-	-	-	-	0.066
AIR FORCE GLOBAL STRIKE CMD	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AIR FORCE WIDE/ PCCIE	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	16.155	-	-	13.595	-	-	6.852	-	-	-	-	-	6.852
Total			-	-	-	-	-	16.155	-	-	13.595	-	-	6.852	-	-	-	-	-	6.852

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

Remarks:
1) PCCIE PMA - FY17 funding will support Program Office Management efforts including computer support, travel, A&AS and cost estimating/analysis services

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 845100 / ENGINEERING AND EOD EQUIPMENT
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0205671F
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	118.734	64.656	-	53.900	53.900	21.839	37.597	40.162	40.348	-	377.236
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	118.734	64.656	-	53.900	53.900	21.839	37.597	40.162	40.348	-	377.236
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	118.734	64.656	-	53.900	53.900	21.839	37.597	40.162	40.348	-	377.236

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY17 Baseline Funding EOD: Program Elements Codes (PECs) associated with P-1 Line are PEC 0204424F (Explosive Ordnance Disposal Forces) for \$7.971M and PEC 0208028F Airfield Damage Repair (ADR) program for \$0.397M funding were zeroed out by an OSD Resource Management Decision (RMD) INV-001.

FY17 OCO Funding JCREW - 0205671F and the European Reassurance Initiative (ERI) for the Airfield Damage Repair (ADR)- 0208028F PECs associated with P-1 Line:

FY17 OCO funding of \$51.900M in PEC 0205671F will procure Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) Mounted and Dismounted systems. JCREW systems are critical self-protection of Mine Resistant, Ambush Protected (MRAP) vehicle mounted, EOD dismantled and airbase Entry Control Point operations.

FY17 OCO funding of \$2.0M in PEC 0208028F will procure European Reassurance Initiative (ERI) for the Airfield Damage Repair (ADR) program. The funding provides civil engineers specialized airfield damage repair equipment to rapidly repair and recover airfields after attack. The time required to accomplish runway repairs is operationally unacceptable with the current Rapid Runway Repair capability. Current efforts under ADR are intended to bring the repair time into operational acceptable limits in support of COCOM post attach Air Tasking Orders.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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:
845100 / ENGINEERING AND EOD 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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	ENGINEERING AND EOD EQUIPMENT			- / -	- / 118.734	- / 64.656	- / -	- / 53.900	- / 53.900
P-40	Total Gross/Weapon System Cost			- / -	- / 118.734	- / 64.656	- / -	- / 53.900	- / 53.900

*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:

FY17 Baseline procurement dollars procures EOD Specialized Equipment and Airfield Damage Repair Kits.

FY17 PEC 0204424F Explosive Ordnance Disposal (EOD) forces and PEC 0208028F Airfield Damage Repair (ADR) program funding were zeroed out by an OSD Resource Management Decision (RMD) INV-001.

FY17 OCO funding:

FY17 OCO funding of \$51.900M in PEC 0205671F will procure Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) systems in the following quantities: 49 JCREW Dismounted systems and 218 JCREW Mounted systems. JCREW systems are critical self-protection for Mine Resistant Ambush Protected (MRAP) vehicle mounted, EOD dismounted and airbase Entry Control Point operations.

FY17 OCO funding of \$2.0M in PEC 0208028F funds the European Reassurance Initiative (ERI) for Airfield Damage Repair (ADR) program and will procure support equipment items for the Major Repair component of Air Field Damage Repair Training/Small Size 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 (10ft 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.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 5 **P-1 Line Item Number / Title:** 845100 / ENGINEERING AND EOD EQUIPMENT **Aggregated Items Title:** ENGINEERING AND EOD EQUIPMENT

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
CVRJ CREW Refurbishment	A		-	-	-	8,053.86	817	6.580	-	-	-	-	-	-	-	-	-	-	-	
JCREW Dismounted Systems	A		-	-	-	116,976.74	215	25.150	98,458.00	110	10.830	-	-	-	74,979.59	49	3.674	74,979.59	49	3.674
JCREW Mounted Systems	A		-	-	-	215,504.59	109	23.490	169,620.00	212	35.959	-	-	-	221,220.18	218	48.226	221,220.18	218	48.226
JCREW Fixed Site Systems	A		-	-	-	451,111.11	18	8.120	-	-	-	-	-	-	-	-	-	-	-	-
CREW Universal Test Sets	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRS (EOD portable X-RAY)	A		-	-	-	79,957.45	94	7.516	-	-	-	-	-	-	-	-	-	-	-	-
Total Containment Vessel	A		-	-	-	325,000.00	10	3.250	-	-	-	-	-	-	-	-	-	-	-	-
Base Support Emergency Response Transport	A		-	-	-	218,518.52	27	5.900	-	-	-	-	-	-	-	-	-	-	-	-
Fuze Disassembly System, Explosive Ordnance Disposal	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Light Tactial Trailers	A		-	-	-	-	-	-	17,000.00	30	0.510	-	-	-	-	-	-	-	-	-
EOD-M Program - Ordance Locator	A		-	-	-	-	-	-	26,921.00	14	0.377	-	-	-	-	-	-	-	-	-
EOD-M IED Search Kits	A		-	-	-	-	-	-	6,000.00	100	0.600	-	-	-	-	-	-	-	-	-
EOD-M Diarming Toolsets	A		-	-	-	-	-	-	10,000.00	24	0.240	-	-	-	-	-	-	-	-	-
EOD-M PowerHawk Robot Attachment	A		-	-	-	-	-	-	39,670.00	30	1.190	-	-	-	-	-	-	-	-	-
EOD-M Mini Remote Firing Device	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RECOVERY REPAIR KIT (Training/Small Sized)	A		-	-	-	168,841.00	4	0.675	435,000.00	3	1.305	-	-	-	400,000.00	5	2.000	400,000.00	5	2.000
RECOVERY REPAIR KIT - R1 (Medium Sized Kit)	A		-	-	-	291,569.00	6	1.749	1,262K	1	1.262	-	-	-	-	-	-	-	-	-
RECOVERY REPAIR KIT - R2 (Large Size Kit)	A		-	-	-	292,066.00	2	0.584	-	-	-	-	-	-	-	-	-	-	-	-
RECOVERY REPAIR KIT - R3 (Very Large Size Kit)	A		-	-	-	219,090.00	1	0.219	2,845K	1	2.845	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 5 **P-1 Line Item Number / Title:** 845100 / ENGINEERING AND EOD EQUIPMENT **Aggregated Items Title:** ENGINEERING AND EOD EQUIPMENT

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
RADBO Equipment, Integration, & Spares Kits	A		-	-	-	2,536K	14	35.500	-	-	-	-	-	-	-	-	-	-	-	-
Support Agadez Infrastructure - IT Service Mgmt Services	A		-	-	-	-	-	-	9,537K	1	9.537	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	118.734	-	-	64.656	-	-	-	-	-	53.900	-	-	53.900
Total			-	-	-	-	-	118.734	-	-	64.656	-	-	-	-	-	53.900	-	-	53.900

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 845380 / Productivity Capital Investment
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	2.495	-	-	-	-	-	-	-	-	-	2.495
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	-	2.495	-	-	-	-	-	-	-	-	-	2.495
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	-	2.495	-	-	-	-	-	-	-	-	-	2.495

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY15 funds Air Force Productivity Capital Investment (PCI) projects in the Productivity Investment Fund (PIF) program. Funds are available to all Air Force organizations to encourage productivity enhancements for more efficient operations, focus on labor cost savings, and reductions in unit costs of operations. This program conserves critical resources, enhances unit capability, and improves combat effectiveness.

Program element associated with this line is 0901215F.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 845380 / Productivity Capital Investment
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Productivity Capital Investment			- / -	- / 2.495	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / -	- / 2.495	- / -	- / -	- / -	- / -

*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:
 FY15 procurement dollars will procure qualifying projects that must cost \$250,000 or more, and amortize in less than four years. Projects are approved based on shortest payback and highest rate of return on investment. Projects continue to yield life cycle savings of over \$3 for every \$1 invested. Productivity Capital Investments is an ongoing program.

Major Commands provide their own offsets from projected savings to sustain future investments for this program. This funding improves the capability to implement productivity improvements and enhancements in the work place, throughout the Air Force.

No Budget Year FY2017 funding requested.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 5	P-1 Line Item Number / Title: 845380 / Productivity Capital Investment	Aggregated Items Title: Productivity Capital Investment
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Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
Air Force Wide Projects	A		-	-	-	-	-	2.495	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Uncategorized			-	-	-	-	-	2.495	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	-	-	-	2.495	-	-	-	-	-	-	-	-	-	-	-	

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	300	-	-	-	-	-	-	-	-	-	-	300
Gross/Weapon System Cost (<i>\$ in Millions</i>)	59.312	64.934	62.250	8.146	-	8.146	8.390	9.523	9.693	9.867	-	232.115
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	59.312	64.934	62.250	8.146	-	8.146	8.390	9.523	9.693	9.867	-	232.115
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	59.312	64.934	62.250	8.146	-	8.146	8.390	9.523	9.693	9.867	-	232.115

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	197,706.67	-	-	-	-	-	-	-	-	-	-	773,716.67

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, 49MMG, 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): 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.

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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
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	Item MDAP/MAIS Code(s): N/A	
<p>Hygiene: Hygiene includes Shower, Shave and Latrine, and Self Help Laundry system which provides personal hygiene facilities in support of BEAR bases.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Shelter Flooring: Shelter flooring varies in size for small and large shelters (ACH, LAMS, Mortuary).</p> <p>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.</p> <p>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.</p> <p>Training/Multi-Media Training - Provides BEAR and items for all training sites and funds for all required BEAR multi-media training requirements.</p> <p>Program element associated with this P-1 Line is: 0401135F.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Mobility Equipment			- / 59.312	- / 64.934	- / 62.250	- / 8.146	- / -	- / 8.146
P-40	Total Gross/Weapon System Cost			300 / 59.312	- / 64.934	- / 62.250	- / 8.146	- / -	- / 8.146

*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:
 FY17 procurement dollars in the amount of \$8.146M procures 18 Large Area Maintenance Shelters (LAMS), 4 9-2 Feeding Units, and PMA in Support of Installation and unit mission requirements for Air Force personnel.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 5 **P-1 Line Item Number / Title:** 845420 / Mobility Equipment **Aggregated Items Title:** Mobility Equipment

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
POWER GENERATION	A		563,447.06	82	46.203	607,500.00	74	44.955	50,000.00	8	0.400	-	-	-	-	-	-	-	-	-
HYGIENE	A		388,000.00	8	3.104	400,000.00	20	8.000	400,000.00	67	26.800	-	-	-	-	-	-	-	-	-
HYGIENE SHELTER	A		13,364.37	208	2.780	11,582.00	80	0.927	11,582.00	268	3.104	-	-	-	-	-	-	-	-	-
10K FUEL BLADDER	A		-	-	-	-	-	-	14,000.00	30	0.420	-	-	-	-	-	-	-	-	-
FEEDING - 9-2	A		500,000.00	2	1.000	500,000.00	16	8.000	470,750.00	45	21.184	508,750.00	4	2.035	-	-	-	508,750.00	4	2.035
FEEDING - EEK	A		-	-	-	-	-	-	250,000.00	30	7.500	-	-	-	-	-	-	-	-	-
LARGE AREA MAINTENANCE SHELTERS (LAMS)	A		-	-	-	-	-	-	-	-	-	256,833.00	18	4.623	-	-	-	256,833.00	18	4.623
NON RECURRING COST	A		-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PMA - OTHER GOVERNMENT COST	A		-	-	0.074	-	-	0.074	-	-	0.074	-	-	0.054	-	-	-	-	-	0.054
PMA- CONTRACTOR SERVICES	A		-	-	1.070	-	-	1.070	-	-	1.070	-	-	1.022	-	-	-	-	-	1.022
TRANSPORTATION	A		-	-	2.082	-	-	1.908	-	-	1.698	-	-	0.412	-	-	-	-	-	0.412
Subtotal: Uncategorized			-	-	59.312	-	-	64.934	-	-	62.250	-	-	8.146	-	-	-	-	-	8.146
Total			-	-	59.312	-	-	64.934	-	-	62.250	-	-	8.146	-	-	-	-	-	8.146

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

Remarks:
Unit Costs for FY17 are assumed and subject to change.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 845990 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	20.147	30.277	28.427	-	28.427	29.981	48.202	49.059	44.645	-	250.738
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	20.147	30.277	28.427	-	28.427	29.981	48.202	49.059	44.645	-	250.738
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	20.147	30.277	28.427	-	28.427	29.981	48.202	49.059	44.645	-	250.738

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 (FSE)//and Fuels Operational Readiness Capability Equipment (FORCE); Generator Power plants, and Deployable Debrief Facilities (DDF). 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, 0208550F, 0401221F, 0402834F, 0502834F, 0502844F, 0702834F, 0802834F.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	8	10	4	-	4	10	3	2	2
	Total Obligation Authority	20.147	29.060	26.538	-	26.538	29.045	47.341	48.192	43.761
AFNG	Quantity	-	2	4	-	4	2	2	2	2
	Total Obligation Authority	-	1.078	1.511	-	1.511	0.819	0.768	0.772	0.787
AFR	Quantity	-	1	1	-	1	1	1	1	1
	Total Obligation Authority	-	0.139	0.378	-	0.378	0.117	0.093	0.095	0.097
Total: Secondary Distribution	Quantity	8	13	9	-	9	13	6	5	5
	Total Obligation Authority	20.147	30.277	28.427	-	28.427	29.981	48.202	49.059	44.645

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

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: 845990 / Items Less Than \$5 Million
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Items Less Than \$5 Million			- / -	- / 20.147	- / 30.277	- / 28.427	- / -	- / 28.427
P-40	Total Gross/Weapon System Cost			- / -	- / 20.147	- / 30.277	- / 28.427	- / -	- / 28.427

*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:
 FY17 procurement dollars in the amount of \$28.427M procures 2 Aircraft Arresting Barriers, 7 Industrial plant equipment, Fuels Support Equipment (FSE) and Fuels Operational Readiness Capability Equipment (FORCE) and PMA in support of installation and unit mission requirements for Air Force personnel.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force																Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 5						P-1 Line Item Number / Title: 845990 / Items Less Than \$5 Million						Aggregated Items Title: Items Less Than \$5 Million								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
FSE / FORCE ⁽¹⁾	A		-	-	-	-	-	11.675	-	-	24.209	-	-	23.886	-	-	-	-	-	23.886
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	11.675	-	-	24.209	-	-	23.886	-	-	-	-	-	23.886
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.010	-	-	0.037	-	-	0.019	-	-	-	-	-	0.019
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.010	-	-	0.037	-	-	0.019	-	-	-	-	-	0.019
FSC 1710 AIRCRAFT ARRESTING SYSTEM	A		-	-	-	0.435	8	3.483	0.311	3	0.934	0.268	2	0.535	-	-	-	0.268	2	0.535
<i>Secondary Distribution</i>																				
AF			-	-	-	-	8	3.483	-	3	0.934	-	2	0.535	-	-	-	-	2	0.535
IPE EQUIPMENT	A		-	-	-	-	-	-	0.364	8	2.914	0.378	7	2.644	-	-	-	0.378	7	2.644
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	7	2.775	-	2	0.755	-	-	-	-	2	0.755
AFNG			-	-	-	-	-	-	-	-	-	-	4	1.511	-	-	-	-	4	1.511
AFR			-	-	-	-	-	-	-	1	0.139	-	1	0.378	-	-	-	-	1	0.378
NON EXPANDABLE SHELTER	A		-	-	-	-	-	-	0.539	2	1.078	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AFNG			-	-	-	-	-	-	-	2	1.078	-	-	-	-	-	-	-	-	-
AFR			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERATOR POWER PLANT	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEPLOYABLE DEBRIEF FACILITIES (DDF)	A		-	-	-	-	-	1.773	-	-	1.105	-	-	1.308	-	-	-	-	-	1.308
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	1.773	-	-	1.105	-	-	1.308	-	-	-	-	-	1.308
PMA - OTHER GOVERNMENT COSTS	A		-	-	-	-	-	0.206	-	-	-	-	-	0.035	-	-	-	-	-	0.035
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	0.206	-	-	-	-	-	0.035	-	-	-	-	-	0.035
MOBILE AIRCRAFT ARRESTING SYSTEM (MAAS) (SEE REMARKS)	A		-	-	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 5 **P-1 Line Item Number / Title:** 845990 / Items Less Than \$5 Million **Aggregated Items Title:** Items Less Than \$5 Million

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Secondary Distribution</i>																				
AF				-	-		-	3.000		-	-		-	-		-	-		-	-
Subtotal: Uncategorized			-	-	-	-	-	20.147	-	-	30.277	-	-	28.427	-	-	-	-	-	28.427
Total			-	-	-	-	-	20.147	-	-	30.277	-	-	28.427	-	-	-	-	-	28.427

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⁾ FY15 funding includes \$10.975M requested for Overseas Contingency Operations to procure Fuels Support Equipment (FSE) and Fuels Operational Readiness Capability Equipment (FORCE).; FY16 funding includes \$9.800M requested for Overseas Contingency Operations to procure Fuels Support Equipment (FSE) and Fuels Operational Readiness Capability Equipment (FORCE).

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects	P-1 Line Item Number / Title: 846070 / DARP RC135
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	24.710	25.072	25.287	-	25.287	25.739	26.191	26.653	27.132	-	180.784
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	24.710	25.072	25.287	-	25.287	25.739	26.191	26.653	27.132	-	180.784
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	24.710	25.072	25.287	-	25.287	25.739	26.191	26.653	27.132	-	180.784

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Detailed information on the DARP RC-135 program remains classified and will be provided on a need-to-know basis. For further information, please contact AF/A2RM, (703) 614-7317.

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.

The program element associated with this P-1 Line is: 0305207F

Justification:

DARP RC-135 program remains classified and will be provided on a need-to-know basis.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects

P-1 Line Item Number / Title:
846080 / DCGS-AF

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 **Item MDAP/MAIS Code(s):** N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	206.743	177.021	169.201	0.800	170.001	165.939 ^(a)	157.536 ^(b)	150.101 ^(c)	152.802 ^(d)	-	1,180.143 ^(e)
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	206.743	177.021	169.201	0.800	170.001	165.939	157.536	150.101	152.802	-	1,180.143
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	206.743	177.021	169.201	0.800	170.001	165.939	157.536	150.101	152.802	-	1,180.143

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	12.000	-	-	-	-	-	-	-	-	-	12.000
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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-off-the-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 was previously managed by four primary efforts: Geospatial Intelligence-1, Systems Release-1 (SIGINT Intelligence), Net Comms-1 (Network/Comm Infrastructure), and Data Links-1. Beginning in FY16, to better align with ACC focus areas and associated capabilities, AF DCGS management has evolved into eight efforts consisting of: 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-1: The GEOINT Transformation effort rapidly integrates new capabilities and migrates GEOINT-specific applications & capabilities into the open architecture framework.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects	P-1 Line Item Number / Title: 846080 / DCGS-AF
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0305208F	Other Related Program Elements: 0305208F, 0305240F
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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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.
4. SIGINT Transformation-1: 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-1: The Sensor Integration effort rapidly integrates AF, Joint, & Coalition Sensor data into DCGS Enterprise to ingest data, perform sensor planning, and Command & Control.
6. Multi-INT-1: 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-1: 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 FY17 appropriation is under \$5M in the budget year, system limitations prevent the P-3A from being displayed.

Other Program Funding Summary (\$ in Millions)/PE0305208F

Line Item	FY2015	FY2016	FY2017	FY2017	FY2017	FY2018	FY2019	FY2020	FY2021	Cost To	Total
RDT&E: BA07: Line Item			Base	OCO	Total					Complete	Cost
.	19.482	22.686	28.902	0.000	18.902	26.422	22.143	22.554	22.954	Continuing	Continuing

Detailed information on PE 0305240F, Support to DoD DCGS Enterprise remains classified and will be provided on a need-to-know basis.

Other Program Funding Summary (\$ in Millions)/PE0305240F

Line Item	FY2015	FY2016	FY2017	FY2017	FY2017	FY2018	FY2019	FY2020	FY2021	Cost To	Total
RDT&E: BA07: Line Item			Base	OCO	Total					Complete	Cost
.	17.115	28.336	23.084	0.000	23.084	26.273	26.768	27.266	27.749	Continuing	Continuing

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 Line Item # 846080 is contained in PEs 0305208F and 0305240F.

FY15 funding totals include \$0 appropriated for Overseas Contingency Operations (PEs 0305208F & 0305240F).

FY16 funding totals include \$0 appropriated for Overseas Contingency Operations (PEs 0305208F & 0305240F).

Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	199.543	177.021	169.201	0.800	170.001	144.848	136.073	128.234	130.541
AFNG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.200	-	-	-	-	-	-	-	-
AFR	Quantity	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects	P-1 Line Item Number / Title: 846080 / DCGS-AF
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0305208F	Other Related Program Elements: 0305208F, 0305240F
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): N/A
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	Secondary Distribution	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
	Total Obligation Authority	-	-	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	206.743	177.021	169.201	0.800	170.001	144.848	136.073	128.234	130.541

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects **P-1 Line Item Number / Title:** 846080 / DCGS-AF

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 **Item MDAP/MAIS Code(s):** N/A

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	0305208F			- / 0.000	- / 181.556	- / 26.393	- / 6.276	- / -	- / 6.276
P-3a	1 / Geospatial Intelligence Bulk Release (GB) 4.1 (Reliability & Maintainability)			- / -	- / -	- / 0.293	- / 16.846	- / 0.800	- / 17.646
P-3a	2 / Geoint Transformation-1 (GEOINT) (Reliability & Maintainability)			- / -	- / -	- / 12.067	- / 11.192	- / -	- / 11.192
P-3a	3 / Network Infrastructure Transformation-1 (Reliability & Maintainability)			- / -	- / -	- / 51.194	- / 45.415	- / -	- / 45.415
P-3a	4 / Multi-Intelligence-1 (Multi-INT) (Reliability & Maintainability)			- / -	- / -	- / 24.000	- / 23.388	- / -	- / 23.388
P-3a	5 / Signal Intelligence Transformation-1 (SIGINT) (No text provided.)			- / -	- / -	- / 7.600	- / 18.057	- / -	- / 18.057
P-3a	6 / DCGS Reference Imagery Transition (DRT) (Reliability & Maintainability)			- / -	- / -	- / 23.655	- / 18.160	- / -	- / 18.160
P-40a	DCGS-AF			- / -	- / 25.187	- / 31.819	- / 29.867	- / -	- / 29.867
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 206.743	- / 177.021	- / 169.201	- / 0.800	- / 170.001

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	0305208F			- / 15.961	- / 6.196	- / 28.615	- / 32.301	- / -	- / 297.298
P-3a	1 / Geospatial Intelligence Bulk Release (GB) 4.1 (Reliability & Maintainability)			- / 19.436	- / 31.131	- / 15.178	- / 16.033	- / -	- / 99.717
P-3a	2 / Geoint Transformation-1 (GEOINT) (Reliability & Maintainability)			- / 12.100	- / 12.878	- / 15.236	- / 16.754	- / -	- / 80.227
P-3a	3 / Network Infrastructure Transformation-1 (Reliability & Maintainability)			- / 34.886	- / 35.541	- / 21.054	- / 16.726	- / -	- / 204.816
P-3a	4 / Multi-Intelligence-1 (Multi-INT) (Reliability & Maintainability)			- / 29.168	- / 15.390	- / 9.295	- / 15.948	- / -	- / 117.189
P-3a	5 / Signal Intelligence Transformation-1 (SIGINT) (No text provided.)			- / 7.682	- / -	- / 15.086	- / 16.736	- / -	- / 65.161
P-3a	6 / DCGS Reference Imagery Transition (DRT) (Reliability & Maintainability)			- / 25.615	- / 34.937	- / 23.770	- / 16.043	- / -	- / 142.180
P-40a	DCGS-AF			- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost			- / 165.939	- / 157.536	- / 150.101	- / 152.802	- / -	- / 1,180.143

*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 2018 through FY 2021 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 2018 Cost Delta: 21.091 million

(b) FY 2019 Cost Delta: 21.463 million

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects		P-1 Line Item Number / Title: 846080 / DCGS-AF
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	Item MDAP/MAIS Code(s): N/A	
<p>(c) FY 2020 Cost Delta: 21.867 million (d) FY 2021 Cost Delta: 22.261 million (e) FY Total Cost Delta: 173.555 million</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6 **P-1 Line Item Number / Title:** 846080 / DCGS-AF **Aggregated Modification Items Title:** 0305208F

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
DCGS10 / Network Communications			-	-	-	-	-	55.831	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	55.831	-	-	-	-	-	-	-	-	-	-	-	
DCGS11 / Data Links			-	-	-	-	-	50.338	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	43.138	-	-	-	-	-	-	-	-	-	-	-	
AFNG			-	-	-	-	-	7.200	-	-	-	-	-	-	-	-	-	-	-	
DCGS12 / Geospatial Intelligence			-	-	-	-	-	40.954	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	40.954	-	-	-	-	-	-	-	-	-	-	-	
DCGS5 / Sensor Integration-1			-	-	-	-	-	-	-	16.800	-	-	4.185	-	-	-	-	-	4.185	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	16.800	-	-	4.185	-	-	-	-	-	4.185	
DCGS6 / System Release (SR) 3.0			-	-	-	-	-	-	-	9.593	-	-	2.091	-	-	-	-	-	2.091	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	9.593	-	-	2.091	-	-	-	-	-	2.091	
DCGS9 / System Release - 1			-	-	-	-	-	34.433	-	-	-	-	-	-	-	-	-	-	-	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	34.433	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	0.000	-	-	181.556	-	-	26.393	-	-	6.276	-	-	-	-	6.276	

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
DCGS10 / Network Communications			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55.831	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DCGS11 / Data Links			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.338	
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AFNG			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DCGS12 / Geospatial Intelligence			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.954	
<i>Secondary Distribution</i>																				

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Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2017 Air Force														Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6							P-1 Line Item Number / Title: 846080 / DCGS-AF							Aggregated Modification Items Title: 0305208F					

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2018			FY 2019			FY 2020			FY 2021			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DCGS5 / Sensor Integration-1			-	-	15.685	-	-	6.196	-	-	15.053	-	-	16.170	-	-	-	-	-	74.089
<i>Secondary Distribution</i>																				
AF			-	-	15.685	-	-	6.196	-	-	15.053	-	-	16.170	-	-	-	-	-	-
DCGS6 / System Release (SR) 3.0			-	-	0.276	-	-	-	-	-	13.562	-	-	16.131	-	-	-	-	-	41.653
<i>Secondary Distribution</i>																				
AF			-	-	0.276	-	-	-	-	-	13.562	-	-	16.131	-	-	-	-	-	-
DCGS9 / System Release - 1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.433
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	15.961	-	-	6.196	-	-	28.615	-	-	32.301	-	-	-	-	-	297.298

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
DCGS10 / Network Communications	0305208F	Reliability & Maintainability
DCGS11 / Data Links	0305208F	Reliability & Maintainability
DCGS12 / Geospatial Intelligence	0305208F	Reliability & Maintainability
DCGS5 / Sensor Integration-1	0305208F	Reliability & Maintainability
DCGS6 / System Release (SR) 3.0	0305208F	Reliability & Maintainability
DCGS9 / System Release - 1	0305208F	Reliability & Maintainability

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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6				P-1 Line Item Number / Title: 846080 / DCGS-AF				Modification Number / Title: 1 / Geospatial Intelligence Bulk Release (GB) 4.1				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	0.293	16.846	0.800	17.646	19.436	31.131	15.178	16.033	-	99.717
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	0.293	16.846	0.800	17.646	19.436	31.131	15.178	16.033	-	99.717
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	0.293	16.846	0.800	17.646	19.436	31.131	15.178	16.033	-	99.717

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

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. Furthermore, GB 4.1 provides the capability for planning and direction, collection, processing and exploitation, analysis and production, and dissemination (PCPAD) of imagery intelligence. Within this segment are the GEOINT front-end data processors and the imagery exploitation systems. The GEOINT front-end data processors receive the raw data from the sensors via the data relay systems and provide initial processing of the imagery data. The imagery exploitation systems provide analysts the basic capability to exploit, analyze, produce, and disseminate imagery.

Justification:

AF DCGS's Other Procurement Air Force (OPAF) focus is the procurement and fielding of proven technologies for multiple efforts including GEOINT GB4.1, which provides an updated common baseline. This common baseline is the platform in which all future upgrades will be integrated. Additionally, future upgrades will also integrate new and/or improved sensor capabilities and enhance interoperability by migrating to an open architecture to improve information sharing in compliance with DoD direction (e.g. DI2E, ICITE, VIP-C).

In FY17 \$.800 Million of Overseas Contingency Operation (OCO) modifies storage (controller heads, software, software maintenance, shelves of disks (\$.400 Million) and infrastructure (SAN switch on the SIPR) (\$.400 Million) for distributed mission system (DMS) capability located at NASIC, Wright-Patterson AFB.

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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.293	16.846	0.800	17.646	19.436	31.131	15.178	16.033
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.293	16.846	0.800	17.646	19.436	31.131	15.178	16.033

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6					P-1 Line Item Number / Title: 846080 / DCGS-AF					Modification Number / Title: 1 / Geospatial Intelligence Bulk Release (GB) 4.1			
Models of Systems Affected: 0305208F				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0305208F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: GEOINT BR 4.1</i>													
B Kits													
Recurring													
GEOINT BR 4.1:EQUIPMENT Group B (Active)	- / -	- / -	- / -	- / 16.469	- / 0.800	- / 17.269	- / 19.002	- / 30.280	- / 14.862	- / 15.627	- / -	- / 97.040	
<i>Subtotal: Recurring</i>	- / -	- / -	- / -	- / 16.469	- / 0.800	- / 17.269	- / 19.002	- / 30.280	- / 14.862	- / 15.627	- / -	- / 97.040	
<i>Subtotal: GEOINT BR 4.1</i>	- / -	- / -	- / -	- / 16.469	- / 0.800	- / 17.269	- / 19.002	- / 30.280	- / 14.862	- / 15.627	- / -	- / 97.040	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / -	- / 16.469	- / 0.800	- / 17.269	- / 19.002	- / 30.280	- / 14.862	- / 15.627	- / -	- / 97.040	
Support (All Modification Items)													
PMA - Other Gov't Costs	- / -	- / -	- / 0.268	- / 0.316	- / -	- / 0.316	- / 0.389	- / 0.779	- / 0.281	- / 0.301	- / -	- / 2.334	
PMA - Contractor Services	- / -	- / -	- / 0.025	- / 0.061	- / -	- / 0.061	- / 0.045	- / 0.072	- / 0.035	- / 0.105	- / -	- / 0.343	
<i>Subtotal: Support</i>	- / -	- / -	- / 0.293	- / 0.377	- / -	- / 0.377	- / 0.434	- / 0.851	- / 0.316	- / 0.406	- / -	- / 2.677	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	0.293	16.846	0.800	17.646	19.436	31.131	15.178	16.033	-	99.717	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6	P-1 Line Item Number / Title: 846080 / DCGS-AF	Modification Number / Title: 1 / Geospatial Intelligence Bulk Release (GB) 4.1

Modification Item 1 of 1: GEOINT BR 4.1

Manufacturer Information

Manufacturer Name: Various				Manufacturer Location: Robins AFB			
Administrative Leadtime (in Months): 0				Production Leadtime (in Months): 0			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6				P-1 Line Item Number / Title: 846080 / DCGS-AF				Modification Number / Title: 2 / Geoint Transformation-1 (GEOINT)				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	12.067	11.192	-	11.192	12.100	12.878	15.236	16.754	-	80.227
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	12.067	11.192	-	11.192	12.100	12.878	15.236	16.754	-	80.227
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	12.067	11.192	-	11.192	12.100	12.878	15.236	16.754	-	80.227

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The 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 Other Procurement Air Force (OPAF) 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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	12.067	11.192	-	11.192	12.100	12.878	15.236	16.754
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	12.067	11.192	-	11.192	12.100	12.878	15.236	16.754

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6					P-1 Line Item Number / Title: 846080 / DCGS-AF					Modification Number / Title: 2 / Geoint Transformation-1 (GEOINT)			
Models of Systems Affected: DCGS				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0305208F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: GEOINT Transformation</i>													
B Kits													
Recurring													
GEOINT Transformation:EQUIPMENT Group B (Active)	- / -	- / -	- / 11.450	- / 10.461	- / -	- / 10.461	- / 11.203	- / 11.883	- / 14.154	- / 15.597	- / -	- / 74.748	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 11.450	- / 10.461	- / -	- / 10.461	- / 11.203	- / 11.883	- / 14.154	- / 15.597	- / -	- / 74.748	
<i>Subtotal: GEOINT Transformation</i>	- / -	- / -	- / 11.450	- / 10.461	- / -	- / 10.461	- / 11.203	- / 11.883	- / 14.154	- / 15.597	- / -	- / 74.748	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 11.450	- / 10.461	- / -	- / 10.461	- / 11.203	- / 11.883	- / 14.154	- / 15.597	- / -	- / 74.748	
Support (All Modification Items)													
PMA - Other Gov't Costs	- / -	- / -	- / 0.312	- / 0.179	- / -	- / 0.179	- / 0.247	- / 0.515	- / 0.395	- / 0.456	- / -	- / 2.104	
PMA - Contractor Services	- / -	- / -	- / 0.305	- / 0.552	- / -	- / 0.552	- / 0.650	- / 0.480	- / 0.687	- / 0.701	- / -	- / 3.375	
<i>Subtotal: Support</i>	- / -	- / -	- / 0.617	- / 0.731	- / -	- / 0.731	- / 0.897	- / 0.995	- / 1.082	- / 1.157	- / -	- / 5.479	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	12.067	11.192	-	11.192	12.100	12.878	15.236	16.754	-	80.227	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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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: 2 / Geoint Transformation-1 (GEOINT)
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Modification Item 1 of 1: GEOINT Transformation

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Robins AFB
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Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 0
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 6
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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6			P-1 Line Item Number / Title: 846080 / DCGS-AF				Modification Number / Title: 3 / Network Infrastructure Transformation-1				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	51.194	45.415	-	45.415	34.886	35.541	21.054	16.726	-	204.816
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	51.194	45.415	-	45.415	34.886	35.541	21.054	16.726	-	204.816
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	51.194	45.415	-	45.415	34.886	35.541	21.054	16.726	-	204.816
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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 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, x86 infrastructure and address 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 sensors, and enhance interoperability by migrating to a service oriented architecture construct and improving data sharing ability in compliance with DoD direction (e.g. DI2E, VIP-C).

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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	51.194	45.415	-	45.415	34.886	35.541	21.054	16.726
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	51.194	45.415	-	45.415	34.886	35.541	21.054	16.726

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6					P-1 Line Item Number / Title: 846080 / DCGS-AF					Modification Number / Title: 3 / Network Infrastructure Transformation-1			
Models of Systems Affected: 0305208F				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0305208F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>	<i>Qty (Each) / Total Cost (\$ M)</i>				
Procurement													
<i>Modification Item 1 of 1: Network Infrastructure</i>													
B Kits													
Recurring													
Network Infrastructure:EQUIPMENT Group B (Active)	- / -	- / -	- / 149.210	- / 143.012	- / -	- / 143.012	- / 132.826	- / 133.161	- / 119.739	- / 115.626	- / -	- / 1193.574	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 149.210	- / 143.012	- / -	- / 143.012	- / 132.826	- / 133.161	- / 119.739	- / 115.626	- / -	- / 1193.574	
<i>Subtotal: Network Infrastructure</i>	- / -	- / -	- / 149.210	- / 143.012	- / -	- / 143.012	- / 132.826	- / 133.161	- / 119.739	- / 115.626	- / -	- / 1193.574	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 149.210	- / 143.012	- / -	- / 143.012	- / 132.826	- / 133.161	- / 119.739	- / 115.626	- / -	- / 1193.574	
Support (All Modification Items)													
PMA - Other Gov't Costs	- / -	- / -	- / 10.314	- / 10.835	- / -	- / 10.835	- / 10.802	- / 10.809	- / 10.475	- / 10.376	- / -	- / 13.611	
PMA - Contractor Services	- / -	- / -	- / 11.670	- / 11.568	- / -	- / 11.568	- / 11.258	- / 11.571	- / 10.840	- / 10.724	- / -	- / 17.631	
<i>Subtotal: Support</i>	- / -	- / -	- / 11.984	- / 12.403	- / -	- / 12.403	- / 12.060	- / 12.380	- / 11.315	- / 11.100	- / -	- / 11.242	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	51.194	45.415	-	45.415	34.886	35.541	21.054	16.726	-	204.816	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6	P-1 Line Item Number / Title: 846080 / DCGS-AF	Modification Number / Title: 3 / Network Infrastructure Transformation-1

Modification Item 1 of 1: Network Infrastructure

Manufacturer Information

Manufacturer Name: Various				Manufacturer Location: Various			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 0			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6				P-1 Line Item Number / Title: 846080 / DCGS-AF				Modification Number / Title: 4 / Multi-Intelligence-1 (Multi-INT)				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	24.000	23.388	-	23.388	29.168	15.390	9.295	15.948	-	117.189
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	24.000	23.388	-	23.388	29.168	15.390	9.295	15.948	-	117.189
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	24.000	23.388	-	23.388	29.168	15.390	9.295	15.948	-	117.189

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides and supports Open Architecture-based Enterprise Services, moves to commodity hardware, a virtual desktop environment, and facilitates enterprise-wide collaborative tools. Furthermore, the Open Architecture (OA), which consists of segment agnostic x86-based hardware workstations capable of supporting the Virtual Desktop Environment to facilitate both Imagery intelligence (IMINT) and SIGINT segment specific software applications; and an enterprise crew communications with Beyond Line of Sight/Line of Sight (BLOS/LOS) voice and data link connectivity between airborne ISR crews and AF DCGS operators.

Justification:

This effort will continue to deliver sustained/modernized Multi-INT Communications, and address any other issues that are identified with other legacy systems/components that AF DCGS must interface with. Additionally, upgrades will meet the operational need to integrate new and/or improved sensor capabilities and storage and architecture requirements to support DCGS OCONUS and enhance interoperability by migrating to an OA construct to improve information sharing and 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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	24.000	23.388	-	23.388	29.168	15.390	9.295	15.948
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	24.000	23.388	-	23.388	29.168	15.390	9.295	15.948

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Exhibit P-3a, Individual Modification: PB 2017 Air Force										Date: February 2016			
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6					P-1 Line Item Number / Title: 846080 / DCGS-AF					Modification Number / Title: 4 / Multi-Intelligence-1 (Multi-INT)			
Models of Systems Affected: 0305208F				Modification Type: Reliability & Maintainability				Related RDT&E PEs: 0305208F					
Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total	
	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)	Qty (Each) / Total Cost (\$ M)				
Procurement													
<i>Modification Item 1 of 1: Multi-Int Upgrades</i>													
B Kits													
Recurring													
Multi-Int Upgrades:EQUIPMENT Group B (Active)	- / -	- / -	- / 23.360	- / 22.933	- / -	- / 22.933	- / 28.611	- / 15.102	- / 9.091	- / 15.597	- / -	- / 114.694	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 23.360	- / 22.933	- / -	- / 22.933	- / 28.611	- / 15.102	- / 9.091	- / 15.597	- / -	- / 114.694	
<i>Subtotal: Multi-Int Upgrades</i>	- / -	- / -	- / 23.360	- / 22.933	- / -	- / 22.933	- / 28.611	- / 15.102	- / 9.091	- / 15.597	- / -	- / 114.694	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 23.360	- / 22.933	- / -	- / 22.933	- / 28.611	- / 15.102	- / 9.091	- / 15.597	- / -	- / 114.694	
Support (All Modification Items)													
PMA - Other Gov't Costs	- / -	- / -	- / 0.279	- / 0.213	- / -	- / 0.213	- / 0.255	- / 0.128	- / 0.108	- / 0.186	- / -	- / 1.169	
PMA - Contractor Services	- / -	- / -	- / 0.361	- / 0.242	- / -	- / 0.242	- / 0.302	- / 0.160	- / 0.096	- / 0.165	- / -	- / 1.326	
<i>Subtotal: Support</i>	- / -	- / -	- / 0.640	- / 0.455	- / -	- / 0.455	- / 0.557	- / 0.288	- / 0.204	- / 0.351	- / -	- / 2.495	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	-	-	24.000	23.388	-	23.388	29.168	15.390	9.295	15.948	-	117.189	

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Exhibit P-3a, Individual Modification: PB 2017 Air Force	Date: February 2016
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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: 4 / Multi-Intelligence-1 (Multi-INT)
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Modification Item 1 of 1: Multi-Int Upgrades

Manufacturer Information

Manufacturer Name: Various	Manufacturer Location: Various
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Administrative Leadtime (in Months): 0	Production Leadtime (in Months): 0
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Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016				
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6				P-1 Line Item Number / Title: 846080 / DCGS-AF			Modification Number / Title: 5 / Signal Intelligence Transformation-1 (SIGINT)				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	7.600	18.057	-	18.057	7.682	-	15.086	16.736	-	65.161
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	7.600	18.057	-	18.057	7.682	-	15.086	16.736	-	65.161
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	7.600	18.057	-	18.057	7.682	-	15.086	16.736	-	65.161
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Signal Intelligence (SIGINT) Transformation effort rapidly integrates new capabilities, leverage mission partner methods and tools, exchange data, and migrate the SIGINT-specific applications/capabilities into the open architecture framework. Furthermore, it develops connectivity directly to NSANET leveraging national SIGINT and the System Release 3.0 (SR3.) architecture to improve the tactical SIGINT available to the warfighter. The current SR3.0 architecture is comprised of multiple core, Distributed Mission Sites (DMS), and National Guard Bureau sites. Currently, AF DCGS SIGINT 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 capabilities in support of SIGINT processing and exploitation capability that can be tailored for all levels of conflict.

Justification:

AF DCGS SIGINT Transformation's 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 consist 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/RJ weapons system interoperability, automated language and speak ID, 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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	7.600	18.057	-	18.057	7.682	-	15.086	16.736
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	7.600	18.057	-	18.057	7.682	-	15.086	16.736

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6	P-1 Line Item Number / Title: 846080 / DCGS-AF	Modification Number / Title: 5 / Signal Intelligence Transformation-1 (SIGINT)

Models of Systems Affected: No text provided. **Modification Type:** No text provided. **Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Procurement												
<i>Modification Item 1 of 1: System Release Upgrade</i>												
B Kits												
Recurring												
System Release Upgrade:EQUIPMENT Group B (Active)	- / -	- / -	- / 7.600	- / 16.828	- / -	- / 16.828	- / 7.160	- / -	- / 14.154	- / 15.595	- / -	- / 61.337
<i>Subtotal: Recurring</i>	- / -	- / -	- / 7.600	- / 16.828	- / -	- / 16.828	- / 7.160	- / -	- / 14.154	- / 15.595	- / -	- / 61.337
<i>Subtotal: System Release Upgrade</i>	- / -	- / -	- / 7.600	- / 16.828	- / -	- / 16.828	- / 7.160	- / -	- / 14.154	- / 15.595	- / -	- / 61.337
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 7.600	- / 16.828	- / -	- / 16.828	- / 7.160	- / -	- / 14.154	- / 15.595	- / -	- / 61.337
Support (All Modification Items)												
PMA - Contractor Services	- / -	- / -	- / -	- / 0.631	- / -	- / 0.631	- / 0.268	- / -	- / 0.430	- / 0.586	- / -	- / 1.915
PMA - Other Gov't Costs	- / -	- / -	- / -	- / 0.598	- / -	- / 0.598	- / 0.254	- / -	- / 0.502	- / 0.555	- / -	- / 1.909
<i>Subtotal: Support</i>	- / -	- / -	- / -	- / 1.229	- / -	- / 1.229	- / 0.522	- / -	- / 0.932	- / 1.141	- / -	- / 3.824
Installation												
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	-	-	7.600	18.057	-	18.057	7.682	-	15.086	16.736	-	65.161

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6	P-1 Line Item Number / Title: 846080 / DCGS-AF	Modification Number / Title: 5 / Signal Intelligence Transformation-1 (SIGINT)

Modification Item 1 of 1: System Release Upgrade

Manufacturer Information

Manufacturer Name: Unknown				Manufacturer Location: Unknown			
Administrative Leadtime (<i>in Months</i>): 0				Production Leadtime (<i>in Months</i>): 0			
Dates	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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Exhibit P-3a, Individual Modification: PB 2017 Air Force							Date: February 2016					
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6				P-1 Line Item Number / Title: 846080 / DCGS-AF				Modification Number / Title: 6 / DCGS Reference Imagery Transition (DRT)				

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	-	23.655	18.160	-	18.160	25.615	34.937	23.770	16.043	-	142.180
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	-	23.655	18.160	-	18.160	25.615	34.937	23.770	16.043	-	142.180
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	-	23.655	18.160	-	18.160	25.615	34.937	23.770	16.043	-	142.180
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Air Force DCGS Reference Imagery Transition (DRT) effort provides data ingest, transfer, and storage capabilities for NGA reference imagery data. This effort will transition AF DCGS reference imagery from the Direct Feed Image Product Library (DFIPL) to a centralized storage solution and distribute imagery across the DCGS Enterprise through a cloud architecture consisting of multiple data hubs, known as Data Storage and Dissemination (DSDs). This effort will also deliver new, and resize the current, low side DSDs to deploy a high side DSD capability for the enterprise. Furthermore, this project will enhance the Peregrine 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 will enhance the network backbone for the weapon system as it moves toward a cloud architecture for the distribution of data. The foundation will be capable of being expanded upon to store and transport future data requirements.

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.

Secondary Distribution		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021
AF	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	23.655	18.160	-	18.160	25.615	34.937	23.770	16.043
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	23.655	18.160	-	18.160	25.615	34.937	23.770	16.043

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6	P-1 Line Item Number / Title: 846080 / DCGS-AF	Modification Number / Title: 6 / DCGS Reference Imagery Transition (DRT)

Models of Systems Affected: 0305208F	Modification Type: Reliability & Maintainability	Related RDT&E PEs: 0305208F
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Financial Plan	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Procurement												
<i>Modification Item 1 of 1: DRT</i>												
B Kits												
Recurring												
DRT:EQUIPMENT Group B (Active)	- / -	- / -	- / 23.322	- / 17.939	- / -	- / 17.939	- / 24.950	- / 34.020	- / 23.154	- / 15.627	- / -	- / 139.012
<i>Subtotal: Recurring</i>	- / -	- / -	- / 23.322	- / 17.939	- / -	- / 17.939	- / 24.950	- / 34.020	- / 23.154	- / 15.627	- / -	- / 139.012
<i>Subtotal: DRT</i>	- / -	- / -	- / 23.322	- / 17.939	- / -	- / 17.939	- / 24.950	- / 34.020	- / 23.154	- / 15.627	- / -	- / 139.012
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 23.322	- / 17.939	- / -	- / 17.939	- / 24.950	- / 34.020	- / 23.154	- / 15.627	- / -	- / 139.012
Support (All Modification Items)												
GROUP B: TOTAL NONRECURRING	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
PMA - Contractor Services	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.356	- / 0.491	- / 0.330	- / 0.223	- / -	- / 1.400
PMA - Other Gov't Costs	- / -	- / -	- / 0.333	- / 0.221	- / -	- / 0.221	- / 0.309	- / 0.426	- / 0.286	- / 0.193	- / -	- / 1.768
<i>Subtotal: Support</i>	- / -	- / -	- / 0.333	- / 0.221	- / -	- / 0.221	- / 0.665	- / 0.917	- / 0.616	- / 0.416	- / -	- / 3.168
Installation												
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	-	-	23.655	18.160	-	18.160	25.615	34.937	23.770	16.043	-	142.180

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Exhibit P-3a, Individual Modification: PB 2017 Air Force		Date: February 2016
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6	P-1 Line Item Number / Title: 846080 / DCGS-AF	Modification Number / Title: 6 / DCGS Reference Imagery Transition (DRT)

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	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation (Organic): Org/Intermediate	Installation Quantity: 0
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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F / 04 / 6 **P-1 Line Item Number / Title:** 846080 / DCGS-AF **Aggregated Items Title:** DCGS-AF

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2015			FY 2016			FY 2017 Base			FY 2017 OCO			FY 2017 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Support to DCGS Enterprise																				
Imagery Processing	A		-	-	-	-	-	-	-	-	3.526	-	-	3.532	-	-	-	-	-	3.532
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	-	-	-	3.526	-	-	3.532	-	-	-	-	-	3.532
Deployable Surface Terminal	A		-	-	-	-	-	7.084	-	-	9.356	-	-	-	-	-	-	-	-	-
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	7.084	-	-	9.356	-	-	-	-	-	-	-	-	-
Extended Tether Program	A		-	-	-	-	-	15.103	-	-	9.521	-	-	18.635	-	-	-	-	-	18.635
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	15.103	-	-	9.521	-	-	18.635	-	-	-	-	-	18.635
Wide Area Networks/ Networks	A		-	-	-	-	-	3.000	-	-	9.416	-	-	7.700	-	-	-	-	-	7.700
<i>Secondary Distribution</i>																				
AF			-	-	-	-	-	3.000	-	-	9.416	-	-	7.700	-	-	-	-	-	7.700
Subtotal: Support to DCGS Enterprise			-	-	-	-	-	25.187	-	-	31.819	-	-	29.867	-	-	-	-	-	29.867
Total			-	-	-	-	-	25.187	-	-	31.819	-	-	29.867	-	-	-	-	-	29.867

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects	P-1 Line Item Number / Title: 846510 / Special Update Program
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	537.370	629.371	576.710	-	576.710	815.175	713.603	617.488	715.228	-	4,604.945
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	-	537.370	629.371	576.710	-	576.710	815.175	713.603	617.488	715.228	-	4,604.945
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	-	537.370	629.371	576.710	-	576.710	815.175	713.603	617.488	715.228	-	4,604.945

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-

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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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and Support Equip / BSA 6: Special Support Projects	P-1 Line Item Number / Title: 846570 / Defense Space Reconnaissance Prog.
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ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	83.998	128.724	-	-	-	-	-	-	-	-	212.722
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	83.998	128.724	-	-	-	-	-	-	-	-	212.722
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	83.998	128.724	-	-	-	-	-	-	-	-	212.722

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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.

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity: 3080F: Other Procurement, Air Force / BA 05: Spares and Repair Parts / BSA 1: Spares And Repair Parts	P-1 Line Item Number / Title: 861900 / Spares and Repair Parts
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A	Item MDAP/MAIS Code(s): 199
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Resource Summary	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	32.813	59.863	15.784	-	15.784	17.831	7.525	7.957	10.245	-	152.018
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	32.813	59.863	15.784	-	15.784	17.831	7.525	7.957	10.245	-	152.018
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	32.813	59.863	15.784	-	15.784	17.831	7.525	7.957	10.245	-	152.018

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

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.

This line contains funding for the following Major Defense Acquisition Program (MDAP):

FAB-T Inc 1, 199

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

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Exhibit P-40, Budget Line Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation / Budget Activity / Budget Sub Activity:
3080F: Other Procurement, Air Force / BA 05: Spares and Repair Parts / BSA 1: Spares And Repair Parts

P-1 Line Item Number / Title:
861900 / Spares and Repair Parts

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

Line Item MDAP/MAIS Code: N/A **Item MDAP/MAIS Code(s):** 199

Exhibits Schedule				Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-18	Spares and Repair Parts			- / -	- / 32.813	- / 59.863	- / 15.784	- / -	- / 15.784
P-40	Total Gross/Weapon System Cost			- / 0.000	- / 32.813	- / 59.863	- / 15.784	- / -	- / 15.784

Exhibits Schedule				FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)					
P-18	Spares and Repair Parts			- / 17.831	- / 7.525	- / 7.957	- / 10.245	- / -	- / 152.018
P-40	Total Gross/Weapon System Cost			- / 17.831	- / 7.525	- / 7.957	- / 10.245	- / -	- / 152.018

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 FY 2017, Combat Training Ranges and Air Traffic Control Approach and Landing System (ATCALS) have large initial spare requirements.

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Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification: PB 2017 Air Force										Date: February 2016		
Appropriation / Budget Activity / Budget Sub Activity: 3080F / 05 / 1				P-1 Line Item Number / Title: 861900 / Spares and Repair Parts						Title: Spares and Repair Parts		
End Item Line Item Number / Name [MDAP/MAIS]	Prior Years (\$ M)	FY 2015 (\$ M)	FY 2016 (\$ M)	FY 2017 Base (\$ M)	FY 2017 OCO (\$ M)	FY 2017 Total (\$ M)	FY 2018 (\$ M)	FY 2019 (\$ M)	FY 2020 (\$ M)	FY 2021 (\$ M)	To Complete (\$ M)	Total (\$ M)
Initial												
BA 05 - Spares and Repair Parts												
833010 / Air Traffic Control, Approach, and Landing System (ATCALs)	-	5.987	2.775	4.964	-	4.964	4.705	2.093	2.430	4.622	-	27.576
861900 / C-17 AIRCRAFT (IF)	-	1.069	1.100	-	-	-	-	-	-	-	-	2.169
834190 / Combat Training Ranges	-	0.900	0.101	5.930	-	5.930	6.868	0.674	0.686	0.698	-	15.857
845420 / Expeditionary Airfield Basing Assets	-	1.462	1.807	2.026	-	2.026	1.941	2.188	2.227	2.266	-	13.917
835070 / Information Systems Security Program	-	4.567	1.987	1.687	-	1.687	2.563	0.935	0.952	0.969	-	13.660
836780 / MILSATCOM Terminals [199]	-	12.267	0.054	-	-	-	-	-	-	-	-	12.321
836730 / NAVSTAR Global Positioning System (Space and Control Segments)	-	0.309	0.533	-	-	-	-	-	-	-	-	0.842
838010 / NCMC - TW/AA System	-	0.901	0.877	0.458	-	0.458	0.822	0.838	0.851	0.866	-	5.613
836770 / Spacelift Range System (SPACE)	-	3.136	-	-	-	-	-	-	-	-	-	3.136
833010 / Space Situation Awareness Operations	-	-	4.868	-	-	-	-	-	-	-	-	4.868
833070 / Weather Observation/ Forecast	-	1.605	0.278	0.719	-	0.719	0.932	0.797	0.811	0.824	-	5.966
861900 / Worldwide Joint Strategic Communications	-	0.610	1.047	-	-	-	-	-	-	-	-	1.657
861900 / Family of Advanced BLoS Terminals (FAB-T)	-	-	44.436	-	-	-	-	-	-	-	-	44.436
Subtotal: Initial	-	32.813	59.863	15.784	-	15.784	17.831	7.525	7.957	10.245	-	152.018
Total Cost (Initial + Replenishment)	-	32.813	59.863	15.784	-	15.784	17.831	7.525	7.957	10.245	-	152.018

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