

UNCLASSIFIED

**Department of Defense
Fiscal Year (FY) 2025 Budget Estimates**

March 2024



Air Force

Justification Book Volume 1 of 1

Procurement, Space Force

UNCLASSIFIED

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Air Force • Budget Estimates FY 2025 • Procurement

Volume 1 Table of Contents

Introduction and Explanation of Contents.....Volume 1 - iii
Comptroller Exhibit P-1.....Volume 1 - v
Master Line Item Table of Contents (by Appropriation then Line Number)..... Volume 1 - xi
Master Line Item Table of Contents (Alphabetically by Line Item Title)..... Volume 1 - xv
Summary 3022..... Volume 1 - xvii
3022 2025 PB P-1M Modification Report.....Volume 1 - xix
Acronyms..... Volume 1 - xxv
Exhibit P-40s..... Volume 1 - 1

UNCLASSIFIED

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Appropriation Language
Fiscal Year (FY) 2025 President's Budget
Procurement, Space Force

For construction, procurement, and modification of spacecraft, launch services, spares, and related equipment (including ground control and communication equipment) and training devices; 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 and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things, \$4,262,979,000 to remain available for obligations until September 30, 2027.

UNCLASSIFIED

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
 FY 2025 President's Budget
 Exhibit P-1 FY 2025 President's Budget
 Total Obligational Authority
 3022F BA Summary
 (Dollars in Thousands)

Mar 2024

Appropriation: Procurement, Space Force	FY 2024 PB		FY 2025 Request
	FY 2023 Actuals	Request with CR Adjustments*	
Budget Activity			
01. SPACE PROCUREMENT, SF	4,064,394	4,710,288	4,254,149
02. SPARES	1,352	906	722
03. Ground Vehicular Equipment			4,919
04. Other Base Maintenance and Support Equipment		3,100	3,189
20. UNDISTRIBUTED		-259,836	
Total Procurement, Space Force	4,065,746	4,454,458	4,262,979

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

UNCLASSIFIED

Department of the Air Force
 FY 2025 President's Budget
 Exhibit P-1 FY 2025 President's Budget
 Total Obligational Authority
 3022F Detail
 (Dollars in Thousands)

Mar 2024

Appropriation: 3022 Procurement, Space Force				FY 2023 Actuals		FY 2024 PB Request with CR Adjustments		FY 2025 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost ⁺	Quantity	Cost
Budget Activity 01: SPACE PROCUREMENT, SF									
Space Procurement, SF									
1	AF Satellite Comm System	A	U		44,583		64,345		65,656
2	Cancelled Year Adjustments	A	U		2,567				
3	Counterspace Systems	A	U		60,241		52,665		4,277
4	Family of Beyond Line-of-Sight Terminals	A	U		16,144		25,057		17,264
5	FABT FORCE ELEMENT TERMINAL	A	U				121,634		234,655
6	Wideband Gapfiller Satellites(Space)	A	U	1	463,982				10,020
7	General Information Tech - Space	A	U		5,424		3,451		2,189
8	GPSIII Follow On	A	U	2	616,962		119,700	2	647,165

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

UNCLASSIFIED

Department of the Air Force
 FY 2025 President's Budget
 Exhibit P-1 FY 2025 President's Budget
 Total Obligational Authority
 3022F Detail
 (Dollars in Thousands)

Mar 2024

Appropriation: 3022 Procurement, Space Force				FY 2023 Actuals		FY 2024 PB Request with CR Adjustments		FY 2025 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost ⁺	Quantity	Cost
9	GPS III Space Segment	A	U		103,340		121,770		68,205
10	Global Positioning (Space)	A	U		947		893		835
11	HERITAGE TRANSITION	A	U		1,896		6,110		
12	Judgement Fund Reimbursement	A	U		1,380				
13	Joint Tactical Ground Stations	A	U				580		
14	Spaceborne Equip (Comsec)	A	U		29,587		83,168		83,829
15	MILSATCOM	A	U		29,333		44,672		37,684
16	SBIR High (Space)	A	U		148,666		39,438		
17	Special Space Activities	A	U		387,341		840,913		658,007
18	Mobile User Objective System	A	U		46,833		101,147		51,601
19	National Security Space Launch	A	U	3	1,024,803	10	2,142,846	7	1,847,486

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

UNCLASSIFIED

Department of the Air Force
 FY 2025 President's Budget
 Exhibit P-1 FY 2025 President's Budget
 Total Obligational Authority
 3022F Detail
 (Dollars in Thousands)

Mar 2024

Appropriation: 3022 Procurement, Space Force				FY 2023 Actuals		FY 2024 PB Request with CR Adjustments		FY 2025 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost ⁺	Quantity	Cost
20	NUDET Detection System	A	U		7,062				
21	PTES HUB	A	U	6	42,464	12	56,482	12	56,148
22	Rocket Systems Launch Program	A	U		39,145		74,848		
23	Space Development Agency Launch	A	U	7	854,288	5	529,468	4	357,178
24	Space Mods	A	U		68,131		166,596		48,152
25	Spacelift Range System Space	A	U		69,275		114,505		63,798
Total SPACE PROCUREMENT, SF					4,064,394		4,710,288		4,254,149
 <u>Budget Activity 02: SPARES</u>									
 Spares									
26	Spares and Repair Parts	A	U		1,352		906		722
Total SPARES					1,352		906		722

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

UNCLASSIFIED

Department of the Air Force
 FY 2025 President's Budget
 Exhibit P-1 FY 2025 President's Budget
 Total Obligational Authority
 3022F Detail
 (Dollars in Thousands)

Mar 2024

Appropriation: 3022 Procurement, Space Force				FY 2023 Actuals		FY 2024 PB Request with CR Adjustments		FY 2025 Request	
Line		Ident		Quantity	Cost	Quantity	Cost ⁺	Quantity	Cost
No	Item Nomenclature	Code	Sec						
<u>Budget Activity 03: Ground Vehicular Equipment</u>									
Passenger Carrying Vehicles									
27	USSF Replacement Vehicles	A	U						4,919
Total Ground Vehicular Equipment									4,919
<u>Budget Activity 04: Other Base Maintenance and Support Equipment</u>									
Support Equipment									
28	Power Conditioning Equipment	A	U				3,100		3,189
Total Other Base Maintenance and Support Equipment									3,189
<u>Budget Activity 20: UNDISTRIBUTED</u>									
Undistributed									
29	Adj to Match Continuing Resolution	A	U				-259,836		
Total UNDISTRIBUTED									-259,836

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

UNCLASSIFIED

Department of the Air Force
 FY 2025 President's Budget
 Exhibit P-1 FY 2025 President's Budget
 Total Obligational Authority
 3022F Detail
 (Dollars in Thousands)

Mar 2024

Appropriation: 3022 Procurement, Space Force			FY 2023 Actuals		FY 2024 PB Request with CR Adjustments		FY 2025 Request		
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost ⁺	Quantity	Cost
Total Procurement, Space Force					4,065,746		4,454,458		4,262,979

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

UNCLASSIFIED

Air Force • Budget Estimates FY 2025 • Procurement

Master Line Item Table of Contents (by Appropriation then Line Number)

Appropriation 3022F: Procurement, Space Force

Line #	BA	BSA	Line Item Number	Line Item Title	Page
1	01	10	AFSCOM	AF Satellite Comm System.....	Volume 1 - 1
3	01	10	CTRSPC	Counterspace Systems.....	Volume 1 - 5
4	01	10	FBLOST	Family of Beyond Line-of-Sight Terminals.....	Volume 1 - 7
5	01	10	FET000	FABT FORCE ELEMENT TERMINAL.....	Volume 1 - 11
6	01	10	GAP000	Wideband Gapfiller Satellites (Space).....	Volume 1 - 17
7	01	10	GNRLIT	General Information Tech - Space.....	Volume 1 - 21
8	01	10	GPS03C	GPSIII Follow On.....	Volume 1 - 23
9	01	10	GPSIII	GPS III Space Segment.....	Volume 1 - 37
10	01	10	GPSSPC	Global Positioning (Space).....	Volume 1 - 43
11	01	10	HRTG00	HERITAGE TRANSITION.....	Volume 1 - 45
13	01	10	JTAGS0	Joint Tactical Ground Stations.....	Volume 1 - 47
14	01	10	MC0MSE	Spaceborne Equip (Comsec).....	Volume 1 - 49
15	01	10	MILSAT	MILSATCOM.....	Volume 1 - 55
16	01	10	MSSBIR	SBIR High (Space).....	Volume 1 - 65
17	01	10	MSSPAC	Special Space Activities.....	Volume 1 - 67
18	01	10	MUOS00	Mobile User Objective System.....	Volume 1 - 69

UNCLASSIFIED

UNCLASSIFIED

Air Force • Budget Estimates FY 2025 • Procurement

Appropriation 3022F: Procurement, Space Force

Line #	BA	BSA	Line Item Number	Line Item Title	Page
19	01	10	NSSL00	National Security Space Launch.....	Volume 1 - 81
20	01	10	NUDETS	NUDET Detection System.....	Volume 1 - 91
21	01	10	PTES00	PTES HUB.....	Volume 1 - 93
22	01	10	RSLP00	Rocket Systems Launch Program.....	Volume 1 - 97
23	01	10	SDALCH	Space Development Agency Launch.....	Volume 1 - 99
24	01	10	SPCMOD	Space Mods.....	Volume 1 - 103
25	01	10	SPRNGE	Spacelift Range System Space.....	Volume 1 - 133

Appropriation 3022F: Procurement, Space Force

Line #	BA	BSA	Line Item Number	Line Item Title	Page
26	02	20	SSPARE	Spares and Repair Parts.....	Volume 1 - 141

UNCLASSIFIED

UNCLASSIFIED

Air Force • Budget Estimates FY 2025 • Procurement

Appropriation 3022F: Procurement, Space Force

Line #	BA	BSA	Line Item Number	Line Item Title	Page
27	03	31	SFV000	USSF Replacement Vehicles.....	Volume 1 - 143

Appropriation 3022F: Procurement, Space Force

Line #	BA	BSA	Line Item Number	Line Item Title	Page
28	04	41	POWCON	Power Conditioning Equipment.....	Volume 1 - 145

UNCLASSIFIED

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Air Force • Budget Estimates FY 2025 • Procurement

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

Line Item Title	Line Item Number	Line #	BA	BSA	Page
AF Satellite Comm System	AFSCOM	1	01	10.....	Volume 1 - 1
Counterspace Systems	CTRSPC	3	01	10.....	Volume 1 - 5
FABT FORCE ELEMENT TERMINAL	FET000	5	01	10.....	Volume 1 - 11
Family of Beyond Line-of-Sight Terminals	FBLOST	4	01	10.....	Volume 1 - 7
GPS III Space Segment	GPSIII	9	01	10.....	Volume 1 - 37
GPSIII Follow On	GPS03C	8	01	10.....	Volume 1 - 23
General Information Tech - Space	GNRLIT	7	01	10.....	Volume 1 - 21
Global Positioning (Space)	GPSSPC	10	01	10.....	Volume 1 - 43
HERITAGE TRANSITION	HRTG00	11	01	10.....	Volume 1 - 45
Joint Tactical Ground Stations	JTAGS0	13	01	10.....	Volume 1 - 47
MILSATCOM	MILSAT	15	01	10.....	Volume 1 - 55
Mobile User Objective System	MUOS00	18	01	10.....	Volume 1 - 69
NUDET Detection System	NUDETS	20	01	10.....	Volume 1 - 91
National Security Space Launch	NSSL00	19	01	10.....	Volume 1 - 81
PTES HUB	PTES00	21	01	10.....	Volume 1 - 93
Power Conditioning Equipment	POWCON	28	04	41.....	Volume 1 - 145
Rocket Systems Launch Program	RSLP00	22	01	10.....	Volume 1 - 97

UNCLASSIFIED

UNCLASSIFIED

Air Force • Budget Estimates FY 2025 • Procurement

Line Item Title	Line Item Number	Line #	BA	BSA	Page
SBIR High (Space)	MSSBIR	16	01	10.....	Volume 1 - 65
Space Development Agency Launch	SDALCH	23	01	10.....	Volume 1 - 99
Space Mods	SPCMOD	24	01	10.....	Volume 1 - 103
Spaceborne Equip (Comsec)	MCOMSE	14	01	10.....	Volume 1 - 49
Spacelift Range System Space	SPRNGE	25	01	10.....	Volume 1 - 133
Spares and Repair Parts	SSPARE	26	02	20.....	Volume 1 - 141
Special Space Activities	MSSPAC	17	01	10.....	Volume 1 - 67
USSF Replacement Vehicles	SFV000	27	03	31.....	Volume 1 - 143
Wideband Gapfiller Satellites (Space)	GAP000	6	01	10.....	Volume 1 - 17

UNCLASSIFIED

UNCLASSIFIED

Department of the Air Force
 FY 2025 President's Budget
 Exhibit P-1 FY 2025 President's Budget
 Total Obligational Authority
 3022F BA Summary
 (Dollars in Thousands)

Mar 2024

Appropriation: Procurement, Space Force	FY 2024 PB		FY 2025 Request
	FY 2023 Actuals	Request with CR Adjustments*	
Budget Activity			
01. SPACE PROCUREMENT, SF	4,064,394	4,710,288	4,254,149
02. SPARES	1,352	906	722
03. Ground Vehicular Equipment			4,919
04. Other Base Maintenance and Support Equipment		3,100	3,189
20. UNDISTRIBUTED		-259,836	
Total Procurement, Space Force	4,065,746	4,454,458	4,262,979

*A full-year FY 2024 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Further Additional Continuing Appropriations and Other Extensions Act, 2024 (Public Law 118-35). The amounts included for FY 2024 reflect the annualized level provided by the continuing resolution.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

P-1M MODIFICATION REPORT – 2025 PB

<u>WEAPON SYSTEM</u>	<u>CLASS</u>	<u>MOD NR</u>	<u>MODIFICATION TITLE</u>	<u>PRIOR</u>	<u>FY-23</u>	<u>FY-24</u>	<u>FY-25</u>	<u>FY-25 OCO</u>	<u>Total FY-25</u>	<u>FY-26</u>	<u>FY-27</u>	<u>FY-28</u>	<u>FY-29</u>	<u>COST TO GO</u>	<u>TOTAL PROG</u>
HRTG00	P	HTRG1	Heritage Transition	7.2	1.9	6.1									15.2
TOTAL FOR CLASS P				7.2	1.9	6.1									15.2
TOTAL FOR OTHER HRTG00				7.2	1.9	6.1									15.2

Totals may not add due to rounding
 TOTAL PROG includes Prior Year and Cost To Go Dollars

P-1M MODIFICATION REPORT – 2025 PB

<u>WEAPON SYSTEM</u>	<u>CLASS</u>	<u>MOD NR</u>	<u>MODIFICATION TITLE</u>	<u>PRIOR</u>	<u>FY-23</u>	<u>FY-24</u>	<u>FY-25</u>	<u>FY-25 OCO</u>	<u>Total FY-25</u>	<u>FY-26</u>	<u>FY-27</u>	<u>FY-28</u>	<u>FY-29</u>	<u>COST TO GO</u>	<u>TOTAL PROG</u>
SPAF SBIRS Mobile System and Fixed Comm Electronics Upgrades	P	SPAF	SBIRS Mobile System & Fixed Comm Electronics Upgrades	27.3	42.3	29.2									98.8
TOTAL FOR CLASS P				27.3	42.3	29.2									98.8
TOTAL FOR OTHER SPAF SBIRS Mobil System and Fixed Comm Electronics Upgrades				27.3	42.3	29.2									98.8

Totals may not add due to rounding
 TOTAL PROG includes Prior Year and Cost To Go Dollars

P-1M MODIFICATION REPORT – 2025 PB

<u>WEAPON SYSTEM</u>	<u>CLASS</u>	<u>MOD NR</u>	<u>MODIFICATION TITLE</u>	<u>PRIOR</u>	<u>FY-23</u>	<u>FY-24</u>	<u>FY-25</u>	<u>FY-25 OCO</u>	<u>Total FY-25</u>	<u>FY-26</u>	<u>FY-27</u>	<u>FY-28</u>	<u>FY-29</u>	<u>COST TO GO</u>	<u>TOTAL PROG</u>
MUOS00		MUOS1	Mobile User Objective System	45.4	46.8	101.1	51.6		51.6	50.0	51.2	52.3	53.3		451.8
TOTAL FOR CLASS				45.4	46.8	101.1	51.6		51.6	50.0	51.2	52.3	53.3		451.8
TOTAL FOR OTHER MUOS00				45.4	46.8	101.1	51.6		51.6	50.0	51.2	52.3	53.3		451.8

Totals may not add due to rounding
 TOTAL PROG includes Prior Year and Cost To Go Dollars

P-1M MODIFICATION REPORT – 2025 PB

<u>WEAPON SYSTEM</u>	<u>CLASS</u>	<u>MOD NR</u>	<u>MODIFICATION TITLE</u>	<u>PRIOR</u>	<u>FY-23</u>	<u>FY-24</u>	<u>FY-25</u>	<u>FY-25 OCO</u>	<u>Total FY-25</u>	<u>FY-26</u>	<u>FY-27</u>	<u>FY-28</u>	<u>FY-29</u>	<u>COST TO GO</u>	<u>TOTAL PROG</u>
1203165SF		NAVSTAR-1	NAVSTAR GPS-OCS COTS UPGRADE	0.1	1.4										1.5
TOTAL FOR CLASS				0.1	1.4										1.5
TOTAL FOR OTHER 1203165SF				0.1	1.4										1.5

Totals may not add due to rounding
 TOTAL PROG includes Prior Year and Cost To Go Dollars

P-1M MODIFICATION REPORT – 2025 PB

<u>WEAPON SYSTEM</u>	<u>CLASS</u>	<u>MOD NR</u>	<u>MODIFICATION TITLE</u>	<u>PRIOR</u>	<u>FY-23</u>	<u>FY-24</u>	<u>FY-25</u>	<u>FY-25 OCO</u>	<u>Total FY-25</u>	<u>FY-26</u>	<u>FY-27</u>	<u>FY-28</u>	<u>FY-29</u>	<u>COST TO GO</u>	<u>TOTAL PROG</u>
CCSMP	P	10.3	Counter Communications System (CCS) Meadowlands Production	103.4	55.0	50.6	4.3		4.3	2.1	2.1	2.2	2.2		221.7
TOTAL FOR CLASS P				103.4	55.0	50.6	4.3		4.3	2.1	2.1	2.2	2.2		221.7
TOTAL FOR OTHER CCSMP				103.4	55.0	50.6	4.3		4.3	2.1	2.1	2.2	2.2		221.7

Totals may not add due to rounding
 TOTAL PROG includes Prior Year and Cost To Go Dollars

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

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
BES	- Budget Estimate Submission
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

UNCLASSIFIED

UNCLASSIFIED

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
IT	- Information Technology
JUON	- Joint Urgent Operational Need
MAIS	- Major Automated Information System Program
MDAP	- Major Defense Acquisition Program
METS	- Mobile Electronic Test Stations
MYP	- Multiyear Procurement
NAVWAR	- Navigation Warfare
NMC Rate	- Not Mission Capable Rate
OCO	- Overseas Contingency Operations
OOC	- Overseas Operations Costs
OT&E	- Operational Test and Evaluation
OWRM	- Other War Reserve Material
PAGEL	- Priced Aerospace Ground Equipment List
PB	- President's Budget
PBR	- Program Budget Review
PMA	- Program Management Administration
PMC	- Procurement Method Code
PNO	- Acquisition Program Number (MDAP Codes)
PR	- Purchase Request
PRCP	- Program Resource Collection Process
PTT	- Part Task Trainer
PY	- Prior Year

UNCLASSIFIED

UNCLASSIFIED

R&M	- Reliability and Maintainability
RAA	- Rapid Acquisition Authority
RDT&E	- Research, Development, Test and Evaluation
RWR	- Radar Warning Receiver
ROM	- Rough Order of Magnitude
SS	- Sole Source
SOF	- Special Operation Force
TAF	- Tactical Air Force
TCAS	- Traffic Collision Alert and Avoidance System
TEWS	- Tactical Electronic Warfare System
TISS	- TEWS Intermediate Support System
TOA	- Total Obligation Authority
WCF	- Working Capital Fund
WRM	- War Reserve Material
WST	- Weapon System Trainer
UAV	- Unmanned Aerial Vehicle
XML	- Extensible Markup Language

BASE / ORGANIZATIONAL ACRONYMS

ACC	- Air Combat Command
AETC	- Air Education & Training Command
AFCAO	- Air Force Computer Acquisition Office
AFCEA	- 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
AFMETCAL	- Air Force Metrology and Calibration Office
AFMLO	- Air Force Medical Logistics Office
AFOSI	- Air Force Office of Special Investigation
AFOTEC	- Air Force Operational Test & Evaluation Center
AFPC	- Air Force Personnel Center

UNCLASSIFIED

UNCLASSIFIED

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
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

UNCLASSIFIED

UNCLASSIFIED

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

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

UNCLASSIFIED

UNCLASSIFIED

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 SFB, 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 SFB, 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

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

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
AFSCOM / AF Satellite Comm System

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	44.583	64.345	65.656	-	65.656	69.612	55.001	56.161	57.289	-	412.647
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	44.583	64.345	65.656	-	65.656	69.612	55.001	56.161	57.289	-	412.647
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	44.583	64.345	65.656	-	65.656	69.612	55.001	56.161	57.289	-	412.647

(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 Satellite Control Network (SCN), is a satellite ground terminal network comprised of two communication nodes (Schriever SFB & Vandenberg SFB) and 15 antenna systems. The systems are distributed globally 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 over 170 satellites in various orbits operating in a congested and contested environment. The SCN conducts an average of 450+ daily satellite contacts supporting Positioning, Navigation and Timing (PNT), Intelligence, Surveillance and Reconnaissance (ISR), Missile Warning and Missile Defense, Communications, Weather, Launch Vehicle Support, 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+ daily satellite contacts are routine command and control (C2) activities, the SCN is also used during satellite emergencies (e.g., a tumbling satellite) because its high-power antennas are often the only terrestrial assets that can re-establish C2 with a non-responsive satellite.

During each Fiscal Year, the SCN typically supports multiple space vehicle emergencies resulting in the preservation of over 4B+ worth of satellites. In addition to routine and emergency satellite operations C2, the SCN provides support to launch and early orbit operations, ensuring worldwide telemetry during launch vehicle ascent, staging, and orbital insertion, and data transmit and receive for new satellites completing early orbit checkout. During each Fiscal Year, the SCN supports multiple launches delivering an average of 14B+ worth of satellites to their operational orbits. Finally, the SCN provides Factory Compatibility Testing (FCT) to ensure satellites and launch vehicles can communicate via the SCN before the satellite is launched. Funding is used to procure modernized equipment and provide Knowledge-Based Services for the SCN to ensure capabilities are available to support DoD, Intelligence community, and civil users. Funds will also be used to address Diminishing Manufacturing Sources (DMS) issues, support Enterprise Ground Service (EGS), Commercial Augmentation, cybersecurity operations, and are planned to be used for required radome replacements.

Additionally, the Space Force will use various contract vehicles to address the highest priority concerns/ issues. Obsolescence and sustainment "worst actors" are prioritized annually in order of criticality to the mission. The potential for failed satellite contacts drives priority. Other projects include: (AF)SCN test bed (ATB) replacements, continued cyber defense work, network automation, and Range/Network/Communication obsolescence replacements.

SCN Commodity Procurements - FY 2025 funds are to procure, modify, refurbish, install, and test the necessary equipment to maintain and optimize Satellite Control Network (SCN) operational capability using various contract vehicles to address the highest priority commodity concerns and issues. Obsolescence and sustainment commodities procurements are prioritized annually in order of criticality to the mission, with the potential for failed satellite contacts driving the procurement priority. Funds are also used to address Diminishing Manufacturing Sources (DMS) issues, maintain the (AF)SCN test bed (ATB), and fund related Cyber Security, networks and communication commodities and associated activities.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: AFSCOM / AF Satellite Comm System
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		

SCN Studies - provides vital analysis through a specified study with defined deliverables that include, but are not limited to, facilitating future planning, analyzing architecture alternatives, performing tradeoffs between alternative systems and architectures, and performing cost-benefit analysis.

SCN Knowledge-Based Services - provides Cyber Security and Test and Evaluation (T&E) expertise to evaluate system functionality and submit packages to Certifying Authorities to obtain Authorizations to Operate (ATO) or Interim Authorizations to Test (IATT); streamlines the validation process and enhances the overall effectiveness of the single Space Force Security Control Assessor (SCA); provides Technical and Acquisition support to integrate new systems and services into SSC programs, gain support for new and on-going efforts in all phases of the acquisition life cycle and standardize systems engineering processes.

SCN Services - provides software configuration services for SSC to include updating and maintaining data to support evolving changes to the configuration management and data management practices.

SCN Replenishment Spares - procures spares for developed systems under the sustainment contract, and transitions to government supply to support the maintenance and sustainment of the SCN.

Funding for this exhibit contained in PE 1203110SF.

These requirements and modifications support performance of a full financial audit as required by title 10 U.S.C. Chapter 9A, Sec 240-D.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
AFSCOM / AF Satellite Comm System

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

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AF Satellite Comm System		A		- / -	- / 44.583	- / 64.345	- / 65.656	- / -	- / 65.656
P-40	Total Gross/Weapon System Cost				- / -	- / 44.583	- / 64.345	- / 65.656	- / -	- / 65.656

*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) SCN Studies (P-5) - FY 2025 funding provides studies that address future planning needs. Studies will also provide critical analysis of architecture alternatives and cyber security requirements.

2) SCN Knowledge-Based Services (P-5) - FY 2025 funding provides critical support to the SSC / SCN missions by maintaining the technical baseline, systems engineering, cybersecurity analysis, expertise and recommendations.

3) SCN Services (P-5) - FY 2025 funding provides configuration and data management of the SCN baselines, specifications, drawing, notice of revisions, specification change notices, configuration control, configuration status accounting, configuration audits, and configuration identification.

4) SCN Commodity Procurement (P-5) - FY 2025 funds will procure commodities that are critical for the reconstitution of the Hula Tracking Station C-side (HTS-C), to include commodities, installation and test for conduction ringwall/facility refurbishment, hybridizing the 46-foot antenna, replacing the radome, and new High Power Amplifier (HPA) and Mission Transport Remote Tracking Station (MTR) core/antenna equipment to enable increased satellite vehicle contacts and enhanced SCN resiliency at the HTS remote site. This effort modernizes the SCN by replacing obsolete hardware components with an updated electronics suite to include moving components to IP-based, virtualized software modems, and the migration of software towards the 64-bit architecture. Modernization reduces footprint, minimizes complexity, lowers operating costs, supports dynamic changes, and prepositions the SCN for future growth while continuing to improve the Cyber Security posture. In addition, funds will procure commodities to replace radome structures at multiple Remote Tracking Stations (RTS), ensuring protection against environmental elements and mitigating the risk of catastrophic radome failures that could lead to significant damage to antennas and equipment and operational downtime for antenna and equipment repair.

Additionally, FY 2025 funds are planned for commodity procurement efforts to address critical cyber security modernization per the guidance provided in the Presidential Executive Order 14028 Improving the Nation's Cybersecurity, National Security Memorandum 8 Improving the Cybersecurity of National Security, Department of Defense, and Intelligence Community Systems, and Office of Management and Budget M-22-09 Moving the U.S. Government Toward Zero Trust Cybersecurity Principles.

5) SCN Replenishment Spares (P-5) - FY 2025 funds the replenishment sparing for systems in sustainment, ensuring SCN users have the required spares in place to support their systems. These funds are required as the source of supply for any items associated with the weapon system, providing levels for consumable and reparable spares, and ensures the system will have the parts to initiate repair. In addition, funds procure the most urgently needed capital equipment replacements for items that exceed the Operation & Maintenance dollar threshold. This equipment replaces items such as, but not limited to, processors, archival event recorders, Diminishing Manufacturing Sources and Material Shortages (DMSMS), and timing systems, of which these items are at the top of the sustainers "worst actors" list and account for significant maintenance effort, down time, and lost or failed contacts.

Additionally, FY 2025 funding will allow the program to rapidly respond to implement system resiliency and situational awareness necessary to operate through the contested space domain. Activities may include, but not limited to, program office support, studies, technical analysis, etc.

6.) The FY 2025 funding request was reduced by \$2.7 million to account for the availability of prior year execution balances.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: AFSCOM / AF Satellite Comm System	Item Number / Title [DODIC]: AF Satellite Comm System
--	---	---

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	44.583	64.345	65.656	-	65.656
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	44.583	64.345	65.656	-	65.656
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	44.583	64.345	65.656	-	65.656

(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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 Satellite Control Network Cost																		
Non Recurring Cost																		
Commodity Procurements	-	-	-	-	-	30.166	-	-	49.161	-	-	50.480	-	-	-	-	-	50.480
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	30.166	-	-	49.161	-	-	50.480	-	-	-	-	-	50.480
<i>Subtotal: Hardware - AF Satellite Control Network Cost</i>	-	-	-	-	-	30.166	-	-	49.161	-	-	50.480	-	-	-	-	-	50.480
Logistics - AF Satellite Comm System Cost																		
Recurring Cost																		
Studies	-	-	-	-	-	0.250	-	-	0.250	-	-	0.250	-	-	-	-	-	0.250
Knowledge-Based Services	-	-	-	-	-	12.979	-	-	11.268	-	-	11.185	-	-	-	-	-	11.185
Replenishment Spares	-	-	-	-	-	0.000	-	-	3.500	-	-	3.570	-	-	-	-	-	3.570
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	13.229	-	-	15.018	-	-	15.005	-	-	-	-	-	15.005
<i>Subtotal: Logistics - AF Satellite Comm System Cost</i>	-	-	-	-	-	13.229	-	-	15.018	-	-	15.005	-	-	-	-	-	15.005
Support - AF Satellite Comm System Cost																		
Services	-	-	-	-	-	1.188	-	-	0.166	-	-	0.171	-	-	-	-	-	0.171
<i>Subtotal: Support - AF Satellite Comm System Cost</i>	-	-	-	-	-	1.188	-	-	0.166	-	-	0.171	-	-	-	-	-	0.171
Gross/Weapon System Cost	-	-	-	-	-	44.583	-	-	64.345	-	-	65.656	-	-	-	-	-	65.656

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: CTRSPC / Counterspace Systems
---	---

ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1206421SF	Other Related Program Elements: 1206421F
--	---	---

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	103.412	60.241	52.665	4.277	-	4.277	2.059	2.111	2.156	2.199	-	229.120
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	103.412	60.241	52.665	4.277	-	4.277	2.059	2.111	2.156	2.199	-	229.120
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	103.412	60.241	52.665	4.277	-	4.277	2.059	2.111	2.156	2.199	-	229.120

(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 Counter Communications System (CCS) Pre-planned Product Improvement (P3I) program provides expeditionary, deployable, reversible offensive space control (OSC) 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, Joint Requirements Oversight Council (JROC) approved Capability Development Document (CDD) shall be accomplished as P3I upgrades to the CCS Block 10.

Funding for this exhibit is in Program Element (PE) 1206421SF, Counterspace Systems. Developmental funding for CCS is in PE 1206421SF, Project 65A001 Counter Satellite Communications System.

Bounty Hunter (BH) is a ground-based, deployable, tactical space Electronic Warfare System (EWS) that provides SATCOM geolocation and interference detection capabilities to support the Defensive Space Control of US systems in a specific AOR. BH provides the capability to monitor, detect, characterize and geolocate friendly and unfriendly electro-magnetic interference (EMI) across multiple radio frequency bands in support of Command, Control, Communications, Computers, and Intelligence (C4I) systems by US Joint Forces. Continuing annual procurement is needed to meet Combatant Command requirements in an ever-changing threat environment.

The system was originally a response to Joint Urgent Operational Need. In 2013, AF Requirements Oversight Council directed incorporation of BH capabilities into a Program of Record (PoR). In March 2019, Bounty Hunter was designated as a PoR and reached Initial Operational Capability in August 2020.

Developmental funding for BH is in PE 1206421SF, Counterspace Systems, Project 65A013 Bounty Hunter.

Justification:

FY 2025 funding for CCS is for support to integration and fielding of remote operations suites, antennae, mission emulators, training equipment, and associated spares required to support integration and fielding.

Bounty Hunter (BH): No procurement funding for FY 2025 and beyond.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
FBLOST / Family of Beyond Line-of-Sight Terminals

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 1203001SF **Other Related Program Elements:** 0303001F, 0303601F, 1203001F

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	16.144	25.057	17.264	-	17.264	16.137	6.819	5.169	5.273	-	91.863
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	16.144	25.057	17.264	-	17.264	16.137	6.819	5.169	5.273	-	91.863
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	16.144	25.057	17.264	-	17.264	16.137	6.819	5.169	5.273	-	91.863

(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:

Activities funded in this program element continue to pay for AN/USQ-225 modernization and integration into multiple legacy systems, other ongoing NC3 acquisition programs, and future capabilities for the overall AF NC3 WS.

The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) Command Post Terminals (CPT) 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 CPT will provide this new, highly secure, state-of-the-art capability for Department of Defense (DoD) platforms to include strategic platforms and airborne/ground command posts via Milstar, Advanced EHF (AEHF), and Evolved Strategic SATCOM (ESS) satellite constellations. FAB-T CPTs will also support the critical command and control (C2) of the Milstar, AEHF, and ESS satellite constellations. In June 2014, the Department of the Air Force down-selected to Raytheon for production of FAB-T CPT. Production contract options to produce CPT terminals were exercised after a successful Milestone C decision was approved September 1, 2015. In FY 2019, the FAB-T Program Management Office executed the final Low Rate Initial Production (LRIP) procurement to complete the total of 84 LRIP CPTs on contract. In FY 2025, FAB-T CPT will continue to pursue activities that ensure FAB-T CPT terminal interoperability with the full AEHF satellite constellation.

The Presidential and National Voice Conferencing (PNVC) Integrator project is a critical element of the Nuclear Command, Control, and Communications (NC3) System. PNVC integrator replaces the Survivable Emergency Conferencing Network (SECN) capability, and will provide anti-jam, anti-scutillation, survivable, and enduring voice communications via the AEHF, and ESS satellite constellations for national and strategic users. Equipment upgrades required for this system include the development and production of several new components by other organizations, including the Baseband Interface Group (BIG) and Multi-Stream Summing Device (MSD III) for airborne users and the Baseband Kit (BBK) / PNVC Equipment enclosure for mobile users.

The PNVC Integrator is responsible for all program elements and funding, including those related to the Defense Information Systems Agency (DISA) and National Security Agency (NSA) components of the PNVC system, in accordance with the transfer directed in the FY 2018 National Defense Authorization Act, Sec. 1661. PNVC funds were transferred from DISA to the Department of the Air Force (DAF) beginning in FY 2021, and the PNVC Integrator will continue to procure remaining PNVC equipment until all fielding is complete. In October 2021, PNVC completed Milestone B/C.

FAB-T CPT was reflected in previous Program Exhibits in the Prior Years through FY 2014 - 2020. PNVC was reflected in previous Program Exhibits in the Prior Years through FY 2015 - 2020. Funding for this exhibit is contained in PE 1203001SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
FBLOST / Family of Beyond Line-of-Sight Terminals

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 1203001SF **Other Related Program Elements:** 0303001F, 0303601F, 1203001F

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost <i>(Each) / (\$ M)</i>					
P-5	Family of Beyond Line-of-Sight Terminals		B		- / -	- / 16.144	- / 25.057	- / 17.264	- / -	- / 17.264
P-40	Total Gross/Weapon System Cost				- / -	- / 16.144	- / 25.057	- / 17.264	- / -	- / 17.264

*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 FY 2025, FAB-T CPT will continue activities that ensure CPT terminal interoperability with the full AEHF satellite constellation, deliver airborne terminals to aircraft depots, provide interim contractor support for the existing fielded terminals, operator training, and organic depot activation in preparation for long-term hardware, software, and crypto sustainment.

In FY 2025, PNVC Integrator will continue to procure any remaining PNVC equipment required for fielding activities, and provide support capability for fielded units including interim contractor support and depot activation activities.

Activities may also include program office support, studies, technical analysis, prototyping, training, and mitigations to address Diminishing Manufacturing Sources and Material Shortages associated with production and fielding of the AEHF family of terminals.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force						Date: March 2024		
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10			P-1 Line Item Number / Title: FBLOST / Family of Beyond Line-of-Sight Terminals			Item Number / Title [DODIC]: Family of Beyond Line-of-Sight Terminals		
ID Code (A=Service Ready, B=Not Service Ready) : B				MDAP/MAIS Code:				
Resource Summary			Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (<i>Units in Each</i>)			-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)			-	16.144	25.057	17.264	-	17.264
Less PY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)			-	16.144	25.057	17.264	-	17.264
Plus CY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)			-	16.144	25.057	17.264	-	17.264
<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>)			-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - Presidential and National Voice Conferencing (PNVC) Cost																		
Recurring Cost																		
BBKs / PNVC Equipment	-	-	-	-	-	3.066	-	-	3.308	-	-	1.675	-	-	-	-	-	1.675
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	3.066	-	-	3.308	-	-	1.675	-	-	-	-	-	1.675
<i>Subtotal: Hardware - Presidential and National Voice Conferencing (PNVC) Cost</i>	-	-	-	-	-	3.066	-	-	3.308	-	-	1.675	-	-	-	-	-	1.675
Hardware - Family of Beyond Line-of-Sight Terminals (FAB-T) Cost																		
Recurring Cost																		
FAB-T Terminals (PE 33601F/33001F)	-	-	-	-	-	0.940	-	-	0.800	-	-	0.580	-	-	-	-	-	0.580
Technical Mission Analysis	-	-	-	-	-	0.942	-	-	0.840	-	-	0.499	-	-	-	-	-	0.499
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	1.882	-	-	1.640	-	-	1.079	-	-	-	-	-	1.079
<i>Subtotal: Hardware - Family of Beyond Line-of-Sight Terminals (FAB-T) Cost</i>	-	-	-	-	-	1.882	-	-	1.640	-	-	1.079	-	-	-	-	-	1.079
Logistics - Family of Beyond Line-of-Sight Terminals (FAB-T) Cost																		
Recurring Cost																		
Interim Contractor Support	-	-	-	-	-	4.649	-	-	4.500	-	-	4.000	-	-	-	-	-	4.000
Depot Activation	-	-	-	-	-	3.568	-	-	12.809	-	-	8.260	-	-	-	-	-	8.260
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	8.217	-	-	17.309	-	-	12.260	-	-	-	-	-	12.260

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force												Date: March 2024					
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10						P-1 Line Item Number / Title: FBLOST / Family of Beyond Line-of-Sight Terminals						Item Number / Title [DODIC]: Family of Beyond Line-of-Sight Terminals					
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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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: Logistics - Family of Beyond Line-of-Sight Terminals (FAB-T) Cost</i>	-	-	-	-	-	8.217	-	-	17.309	-	-	12.260	-	-	-	-	-	12.260
Support - Family of Beyond Line-of-Sight Terminals (FAB-T) Cost																		
FAB-T A&AS	-	-	-	-	-	2.035	-	-	2.000	-	-	1.750	-	-	-	-	-	1.750
Other Support	-	-	-	-	-	0.944	-	-	0.800	-	-	0.500	-	-	-	-	-	0.500
<i>Subtotal: Support - Family of Beyond Line-of-Sight Terminals (FAB-T) Cost</i>	-	-	-	-	-	2.979	-	-	2.800	-	-	2.250	-	-	-	-	-	2.250
Gross/Weapon System Cost	-	-	-	-	-	16.144	-	-	25.057	-	-	17.264	-	-	-	-	-	17.264

Remarks:

This P-Doc incorporates PE 1203001SF for FAB-T / PNVC.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: FET000 / FABT FORCE ELEMENT TERMINAL
---	--

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 1203001SF
--	---	--

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	0.000	121.634	234.655	-	234.655	148.819	23.477	23.973	24.457	-	577.015
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	0.000	121.634	234.655	-	234.655	148.819	23.477	23.973	24.457	-	577.015
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	0.000	121.634	234.655	-	234.655	148.819	23.477	23.973	24.457	-	577.015

(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:

Activities funded in this program continue to pay for AN/USQ-225 weapons system modernization, integration into multiple legacy systems, other ongoing NC3 acquisition programs, and future capabilities for the overall AF NC3 WS.

The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) Force Element Terminal (FET) program replaces the Ultra High Frequency (UHF) Milstar terminals and provides secure, protected, and survivable communications for the strategic warfighter through airborne-based Military Satellite Communication (MILSATCOM) terminals. The FAB-T FET will provide worldwide nuclear and non-nuclear, survivable, anti-jam Low Probability of Detect (LPD)/Low Probability of Intercept (LPI) data and voice communications. The FAB-T FET will be interoperable with Advanced Extremely High Frequency (AEHF), Enhanced Polar Systems - Recapitalization (EPS-R), and Evolved Strategic SATCOM (ESS) satellite constellations utilizing Extended Data Rate (XDR) waveforms and will be installed on the B-52 aircraft (threshold).

The FAB-T FET development program was executed as a Middle Tier of Acquisition (MTA) under R-1 Program Element 1203001SF, Family of Advanced BLoS Terminals (FAB-T). The program is planned to transition to the Major Capability Acquisition Pathway at Milestone C. This budget line provides funding for the follow-on production portion of the program.

Funding for this exhibit is contained in PE 1203001SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
FET000 / FABT FORCE ELEMENT TERMINAL

ID Code (A=Service Ready, B=Not Service Ready): A **Program Elements for Code B Items:** N/A **Other Related Program Elements:** 1203001SF

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	FABT FORCE ELEMENT TERMINAL	P-5a	A		- / -	- / 0.000	- / 121.634	- / 234.655	- / -	- / 234.655
P-40	Total Gross/Weapon System Cost				- / -	- / 0.000	- / 121.634	- / 234.655	- / -	- / 234.655

*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 FY 2025, FAB-T FET will ramp up production activities to procure 18 terminals in the budget year and ultimately procure 83 FETs, including 76 for the B-52 platform, 7 terminals for training, labs, and depots as well as spares for sustainment, integration, testing, and training activities.

Funding increase from FY 2024 to FY 2025 is attributable to the procurement of additional FET quantities for B-52 operations, depot/lab/trainer use, and spares. FY 2025 funding also increases Radiation Lot Acceptance Testing (RLAT) to support hardening testing of required components for Lot 2 and earlier testing of Lot 3 identified components. Additionally, FY 2025 funding will be used for logistics planning, initiation of interim contractor support activities, and procurement of hardware bench-stock components required for sustainment.

Other activities will include program office support, studies, technical analysis, training, testing/test support, test deficiency resolution, modifications, and procurements to mitigate Diminishing Manufacturing Sources and Materiel Shortages that could adversely impact cost and schedule. FY 2025 production funding increases for these activities as the program's prior development funding (contained in R-1 Program Element 1203001SF) for program support activities ends in FY 2024.

Specific quantities shown in this exhibit are based on the program office's current best estimate and may vary based on fact-of-life changes within the program.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: FET000 / FABT FORCE ELEMENT TERMINAL	Item Number / Title [DODIC]: FABT FORCE ELEMENT TERMINAL
--	--	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	0.000	121.634	234.655	-	234.655
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	0.000	121.634	234.655	-	234.655
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	0.000	121.634	234.655	-	234.655

(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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - FAB-T FET Cost																		
Recurring Cost																		
FAB-T Force Element Terminals Production ^(†)	-	-	-	-	-	0.000	3.888	13	50.550	4.110	18	73.980	-	-	-	4.110	18	73.980
Radiation Lot Acceptance Testing	-	-	-	-	-	0.000	-	-	19.714	-	-	28.986	-	-	-	-	-	28.986
Spares/Repair Parts (Equivalent Sets) ^(†)	-	-	-	-	-	0.000	3.817	10	38.170	4.064	16	65.019	-	-	-	4.064	16	65.019
Depot/Lab Production Units ^(†)	-	-	-	-	-	0.000	-	-	0.000	4.110	2	8.220	-	-	-	4.110	2	8.220
Hardware Bench Stock Components and DMSMS	-	-	-	-	-	0.000	-	-	0.000	-	-	18.850	-	-	-	-	-	18.850
Tech Mission Analysis	-	-	-	-	-	0.000	-	-	0.500	-	-	5.100	-	-	-	-	-	5.100
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	0.000	-	-	108.934	-	-	200.155	-	-	-	-	-	200.155
<i>Subtotal: Hardware - FAB-T FET Cost</i>	-	-	-	-	-	0.000	-	-	108.934	-	-	200.155	-	-	-	-	-	200.155
Logistics - FAB-T FET Cost																		
Recurring Cost																		
Interim Contractor Support	-	-	-	-	-	0.000	-	-	0.000	-	-	11.000	-	-	-	-	-	11.000
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	0.000	-	-	0.000	-	-	11.000	-	-	-	-	-	11.000
<i>Subtotal: Logistics - FAB-T FET Cost</i>	-	-	-	-	-	0.000	-	-	0.000	-	-	11.000	-	-	-	-	-	11.000

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force												Date: March 2024					
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10						P-1 Line Item Number / Title: FET000 / FABT FORCE ELEMENT TERMINAL						Item Number / Title [DODIC]: FABT FORCE ELEMENT TERMINAL					
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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - FAB-T FET Cost																		
A&AS	-	-	-	-	-	0.000	-	-	5.000	-	-	9.500	-	-	-	-	-	9.500
FFRDC	-	-	-	-	-	0.000	-	-	4.200	-	-	7.250	-	-	-	-	-	7.250
Other Support	-	-	-	-	-	0.000	-	-	3.500	-	-	6.750	-	-	-	-	-	6.750
<i>Subtotal: Support - FAB-T FET Cost</i>	-	-	-	-	-	0.000	-	-	12.700	-	-	23.500	-	-	-	-	-	23.500
Gross/Weapon System Cost	-	-	-	-	-	0.000	-	-	121.634	-	-	234.655	-	-	-	-	-	234.655

Remarks:
Specific quantities shown in this exhibit are based on the program office's current best estimate and may vary based on fact-of-life changes within the program.

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

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: FET000 / FABT FORCE ELEMENT TERMINAL	Item Number / Title [DODIC]: FABT FORCE ELEMENT TERMINAL
--	--	--

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
FAB-T Force Element Terminals Production		2024	Raytheon / MA	TBD	Hanscom AFB	Dec 2023	Dec 2026	13	3.888	Y		
FAB-T Force Element Terminals Production		2025	Raytheon / MA	TBD	Hanscom AFB	Dec 2024	Dec 2027	18	4.110	Y		
Spares/Repair Parts (Equivalent Sets)		2024	Raytheon / MA	TBD	Hanscom AFB	Dec 2023	Dec 2026	10	3.817	Y		
Spares/Repair Parts (Equivalent Sets)		2025	Raytheon / MA	TBD	Hanscom AFB	Dec 2024	Dec 2027	16	4.064	Y		
Depot/Lab Production Units		2025	Raytheon / MA	TBD	Hanscom AFB	Dec 2024	Dec 2027	2	4.110	Y		

Remarks:
Specific quantities shown in this exhibit are based on the program office's current best estimate and may vary based on fact-of-life changes within the program.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: GAP000 / Wideband Gapfiller Satellites (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: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	1	-	-	-	-	-	-	-	-	-	1
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	463.982	0.000	10.020	-	10.020	0.000	0.000	0.000	0.000	-	474.002
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	463.982	0.000	10.020	-	10.020	0.000	0.000	0.000	0.000	-	474.002
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	463.982	0.000	10.020	-	10.020	0.000	0.000	0.000	0.000	-	474.002

(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>)	-	463.982	-	-	-	-	-	-	-	-	-	474.002

Description:

The Wideband Global SATCOM (WGS) System provides the DoD with high data rate Military Satellite Communication (MILSATCOM) services in accordance with the Joint Space Management Board-approved MILSATCOM architecture (August 1996), the Joint Requirements Oversight Council (JROC)-approved MILSATCOM Capstone Requirements Document (October 1997), and JROC-approved WGS Operational Requirements Document (May 2000). This program was originally conceived to augment the near-term "bandwidth gap" in warfighter communications needs. Dual-frequency WGS satellites augment, then replace the DoD's Defense Satellite Communications System X-band service and augment one-way Global Broadcast Service Ka-band capabilities. In addition, WGS provides a high-capacity two-way Ka-band service. Funding for this effort is to develop WGS-11 & 12 modern digital payloads for launch in FY 2025 and FY 2027, respectively, which will increase the availability of military-grade communications by providing more coverage beams than their existing WGS predecessors combined and delivering twice the operational capacity than previous WGS analog satellites. This effort funded \$21.982M in FY 2023 to complete WGS-11 production. This effort also funded \$442M in FY 2023 for WGS-12 to be protected wideband satellite by developing and hosting a tactical anti-jam payload.

WGS has 10 operational legacy satellites on-orbit, each developed by building on heritage WGS capabilities. Continually improving WGS capability and leveraging advances in Boeing commercial technology, in FY 2018 the DoD procured a more advanced single WGS-11 satellite enhancing support to the US military, DoD, and allied nations with more flexibility and mission capacity to support dispersed users than previous WGS spacecraft. WGS-11 allows operators to create unique coverage anywhere within the satellite's field of view and custom designed for the mission at hand. In FY 2024, the DoD will procure a WGS-12, an expected clone of the WGS-11 spacecraft. The advanced beam management capabilities of WGS-11 & 12 payloads under development will produce more coverage beams (over 1500) than the entire existing WGS constellation and deliver twice the mission capacity than WGS-10 can, thereby operationally increase the availability of military-grade communications.

WGS Block I consists of satellites 1-3, Block II consists of satellites 4-6 and Block II Follow-on (B2FO) includes satellites 7-10 and WGS-11. WGS satellites 1-10 have been funded, procured and launched in previous budget cycles. WGS-11 hosts the Protected Tactical SATCOM (PTS) anti-jam payload, funded under the PTS program, PE 1206761SF. WGS-12 is a planned addition to the B2FO contract, including PTS as a hosted payload.

In the Consolidated Appropriations Act, FY 2018, Congress added \$600M Space Procurement Air Force (SPAF) in FY 2018 for "full funding for WGS-11 and WGS-12." A sole source Request for Proposal was released to Boeing in June 2018. A final decision was made to procure a single satellite with twice the operational capacity of WGS-10, as the best approach to delivering the directed additional WGS capacity in a cost-effective manner. Total WGS-11 3021/3022 funds are \$670.859M. WGS-11 will host a PTS payload providing robust anti-jam capability to tactical warfighters, funded by the PTS program in PE 1206761SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: GAP000 / Wideband Gapfiller Satellites (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: N/A		
<p>In the FY 2023 Consolidated Appropriations Act, Congress added \$442M for "Protected Wideband Satellite" to "procure a protected wideband satellite to provide resilient, jam resistant tactical communications to support warfighter needs." The United States Space Force (USSF) has interpreted the Congressional add as funding expected to cover the costs for a WGS-12 spacecraft clone of WGS-11, to include acquiring the same PTS anti-jam prototype payload as hosted on WGS-11. The current B2FO Acquisition Program Baseline (APB) allows for procurement of a WGS-12 and the acquisition is planned to be a Firm Fixed Price (FFP) effort beginning in FY 2024 with integration of PTS in FY 2026 and launch in FY 2027. A mix of USSF and International Partner (IP) sources will cover launch, ground, and other Government costs.</p> <p>IPs receive constellation-wide WGS resources commensurate with their financial contributions to the WGS system. Investment from IPs to cooperatively enhance the system started in November 2007 through a bilateral Memorandum of Understanding (MOU) with Australia to fund WGS space vehicle (SV)-6, launch and launch services. Five countries signed a new multilateral WGS MOU in CY 2012 and funded the procurement of WGS SV-9. In CY 2017, Amendment One to the WGS MOU leveraged additional funding for resiliency enhancements from two new IPs (Czech Republic and Norway). There is an International Agreement via the State Department regarding IP collaboration with WGS-11. In May 2022, nine countries signed Amendment Two to the multilateral MOU (adds Belgium and United Kingdom) to cover necessary ground upgrades and launch costs for WGS-11 not covered by the FY 2018 Congressional add, and extends the duration of the WGS MOU, as amended, through September 2039. Space Systems Command (SSC) provides program management, integration, and engineering expertise through FY 2026. Discussions for potential future partnerships regarding the WGS program continue in support of National Space Policy and improved operational efficiency.</p> <p>Funding for this exhibit is contained in PE 1203600SF.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs **P-1 Line Item Number / Title:** GAP000 / Wideband Gapfiller Satellites (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: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost <i>(Each) / (\$ M)</i>					
P-5	Wideband Gapfiller Satellites (Space)		A		- / -	1 / 463.982	- / 0.000	- / 10.020	- / -	- / 10.020
P-40	Total Gross/Weapon System Cost				- / -	1 / 463.982	- / 0.000	- / 10.020	- / -	- / 10.020

*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:
 FY 2025 continues WGS-12 Technical Mission Assurance specifically for critical FFRDC, SE&I, program office, and engineering support until International Partnership funding is available. The funds will be used for internal trade studies, systems engineering and integration planning, and technical and mission analysis to complete launch campaign, orbit raising and operational acceptance. Funds resources to support critical contractor management and oversight of WGS-12 production, launch, and fielding efforts following Critical Design Review (CDR) to maintain Initial Launch Capability (ILC) in FY 2027. Supports WGS-11 mission assurance activities and post check out and launch activities. Ensures minimal disruption to WGS-11 launch priority in FY 2025.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force						Date: March 2024		
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10			P-1 Line Item Number / Title: GAP000 / Wideband Gapfiller Satellites (Space)			Item Number / Title [DODIC]: Wideband Gapfiller Satellites (Space)		
ID Code (A=Service Ready, B=Not Service Ready) : A				MDAP/MAIS Code:				
Resource Summary			Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (<i>Units in Each</i>)			-	1	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)			-	463.982	0.000	10.020	-	10.020
Less PY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)			-	463.982	0.000	10.020	-	10.020
Plus CY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)			-	463.982	0.000	10.020	-	10.020
<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>)			-	463.982	-	-	-	-

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

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
Space Vehicle - Wideband Gapfiller Satellites Cost																		
Recurring Cost																		
WGS-11 Integration/ Test Support	-	-	-	-	-	6.233	-	-	0.000	-	-	-	-	-	-	-	-	-
WGS-12 Development	-	-	-	-	-	442.000	-	-	0.000	-	-	-	-	-	-	-	-	-
Technical Mission Analysis	-	-	-	-	-	4.503	-	-	0.000	-	-	5.565	-	-	-	-	-	5.565
SE&I	-	-	-	-	-	7.941	-	-	-	-	-	2.608	-	-	-	-	-	2.608
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	460.677	-	-	0.000	-	-	8.173	-	-	-	-	-	8.173
<i>Subtotal: Space Vehicle - Wideband Gapfiller Satellites Cost</i>	-	-	-	-	-	460.677	-	-	0.000	-	-	8.173	-	-	-	-	-	8.173
Support - Wideband Gapfiller Satellites Cost																		
A&AS	-	-	-	-	-	3.250	-	-	-	-	-	1.787	-	-	-	-	-	1.787
Other Support	-	-	-	-	-	0.055	-	-	-	-	-	0.060	-	-	-	-	-	0.060
<i>Subtotal: Support - Wideband Gapfiller Satellites Cost</i>	-	-	-	-	-	3.305	-	-	-	-	-	1.847	-	-	-	-	-	1.847
Gross/Weapon System Cost	-	-	-	463.982	1	463.982	-	-	0.000	-	-	10.020	-	-	-	-	-	10.020

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: GNRLIT / General Information Tech - Space
--	---

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203174SF, 1208736SF	Other Related Program Elements: N/A
--	--	--

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	5.424	3.451	2.189	-	2.189	1.839	1.888	1.928	1.965	-	18.684
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	5.424	3.451	2.189	-	2.189	1.839	1.888	1.928	1.965	-	18.684
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	5.424	3.451	2.189	-	2.189	1.839	1.888	1.928	1.965	-	18.684

(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 for this exhibit is contained in PE 1203173SF, PE 1203174SF, PE 1208736SF, and PE 1208739SF.

PE 1203173SF Research & Development (R&D) Space and Missile Operations (RDSMO)

Beginning in FY 2024, RDSMO Procurement, Space Force (PSF), General Information Tech - Space (GNRLIT) funding transitioned to RDT&E PE 1203173SF, Space and Missile Test and Evaluation Center, Project R&D Space & Missile Operations (RDSMO) and is described in the following budget exhibit: 3620, RDT&E, SF/ BA 7: Operational Systems Development, Exhibit R-2 (FY 2024 PB Line # 61 and FY 2025 PB Line # 56).

PE 1203174SF Space Innovation, Integration and Rapid Technology Development

Located at Peterson Space Force Base, Colorado, the Space Innovation, Integration and Rapid Technology Development (SIIRTD) program supports the U.S. Space Force Analysis Center Advanced 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. AVAC allows leadership to make decisions based on quantifiable operational impacts using various vignettes and studies applied to space and cyber assets. Funding buys system-specific hardware, software, routers, licenses, etc., to maintain the efficiency and compatibility with all current models.

PE 1208736SF Range and Adversary

This effort is executed by the Space Training and Readiness Command (STARCOM) located at Peterson Space Force Base in Colorado Springs. The Program Element enables the Department of Defense's only Space Test and Training Range, providing joint, service, and coalition customers with a safe and secure environment to support space control technique development and space test, training, and exercise activities. Also enables space aggressor capability which provides the United States Space Force's (USSF) professional adversary force, integrating across domains to ensure allied victory. Aggressors replicate the threat through expertise in multi-domain adversary operations and tactics, education of USSF, United States Air Force, Joint, and Coalition communities on multi-domain threats, as well as execution of integrated, advanced, and credible multi-domain threat replication operations in exercise and test environments. Provides threat replication across the full spectrum of space and counter space threats, to include Global Positioning System Electronic Attack, Satellite Communication EA, Orbital Warfare, and Adversary SATCOM Network.

PE 1208739SF Training and Readiness

This effort is executed by the Space Training and Readiness Command (STARCOM) located at Peterson Space Force Base in Colorado Springs. As directed by the AF Operational Training Infrastructure 2035 Flight Plan, space training holds a high priority for training capabilities that include a holistic and integrated approach and achieves full-spectrum readiness for space forces. The Distributed Communications

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: GNRLIT / General Information Tech - Space
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203174SF, 1208736SF	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
Architecture (DCA) within the Distributed Mission Operations provides this technology and allows the USSF to evolve toward more space trainers and simulators that are network capable and able to interact in a synthetic environment with other weapon system trainers and a multi-domain command and control entity, pulling in data from a resilient enterprise ground architecture. The technology within the DCA allows for a distributed combat training environment for warfighters around the globe, remotely, without the need to travel to a dedicated training/exercise site.		
<p>Justification: PE 1203173SF RDSMO: No FY 2025 funding requested.</p> <p>PE 1203174SF SIIRTD FY 2025 (\$0.444M) Continue to support analytics and simulation. Includes looking at the path for Advanced Virtual Analysis Capability (AVAC) to provide greater collaboration methods for analysts and customers. All AVAC networks are currently operational and have under-gone major modification and design change necessary to not only meet additional functional capability requirements of the users/analysts, but to also meet security compliance requirements. This year's funds will include removing or upgrading hardware and software that is end-of-life or not approved for use under current requirements. Ongoing activities within the Space Operations Command are to continue providing analytical support concerning space environments, tools, and techniques.</p> <p>PE 1208736SF Range and Adversary FY 2025 (\$1.073M) funds in this program provides realistic and relevant threat replication, through Commercial off-the-shelf (COTS) GPS and SATCOM equipment. Current equipment is over 10 years old, failing, antiquated and therefore does not accurately replicate existing adversary threats due to system limitations. Procurement funding will provide a 166% increase SATCOM availability and 120% increase in GPC electronic attack assets used to replicate adversary counter-space operations in support of Joint training audiences. Funds provide recapitalization of five SATCOM equipment assets and eight GPS assets within FY23-25; FY26 and beyond provides a steady-state sustainment and replacement cycle for both SATCOM and GPS assets. Without funding, the space aggressors are at risk of significant degradation in their threat replication capabilities. Aging equipment will prevent the space aggressors from providing a realistic threat environment and degrade our ability to train joint and coalition partners in a contested, degraded, operationally-limited space environment.</p> <p>PE 1208739SF Training and Readiness FY 2025 (\$1.067M) funds procures information technology hardware & software infrastructure for the Distributed Communications Architecture (DCA) for the Distributed Mission Operations (DMO) for Space. This system provides a network-based communications capability enabling dispersed space personnel to participate in space exercises, like Space Flag, wargames and advanced space training events. DMO provides a high-fidelity theater synthetic battlespace and world-class exercise control to support joint distributed warfighter training, testing and experimentation across the operational and tactical levels of war. It can also support limited command and control capabilities for space operations.</p> <p>The FY 2025 funding request was reduced by \$0.40 million to account for the availability of prior year execution balances.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: GPS03C / GPSIII Follow On
--	---

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203269SF	Other Related Program Elements: 1203269F
--	---	---

Line Item MDAP/MAIS Code: 590

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	6	2	-	2	-	2	2	2	2	2	2	20
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,408.580	616.962	119.700	647.165	-	647.165	710.019	744.030	759.736	775.039	1,388.205	7,169.436
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,408.580	616.962	119.700	647.165	-	647.165	710.019	744.030	759.736	775.039	1,388.205	7,169.436
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,408.580	616.962	119.700	647.165	-	647.165	710.019	744.030	759.736	775.039	1,388.205	7,169.436

(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>)	234.763	308.481	-	323.583	-	323.583	355.010	372.015	379.868	387.520	694.103	358.472

Description:

The Global Positioning System (GPS) is a space-based navigation system that fills validated Joint Service requirements for worldwide, accurate, common grid, three-dimensional positioning/navigation for military aircraft, ships, and ground personnel. The consistent accuracy, unaffected by location or weather and available in real time, significantly improves effectiveness of reconnaissance, weapons delivery, mine countermeasures and rapid deployment for all services. GPS must comply with Title 10 United States Code (USC) Sec. 2281, which requires that the Secretary of Defense ensures the continued sustainment and operation of GPS for military and civilian purposes, and 51 USC Sec. 50112, which requires that GPS complies with certain standards and facilitates international cooperation.

The system is composed of three programs: User Equipment (funded under Program Element (PE) 1203164F, 1203164SF), Space (funded under PE 1203165F, 1203265F, 1203265SF, 1203269F, and 1203269SF), and a Control Network (funded under PE 1206423F, 1206423SF and 1203165F). The satellites broadcast high accuracy data using precisely synchronized signals that are received and processed by user equipment installed in military platforms. The user equipment computes the platform position and velocity and provides steering vectors to target locations or navigation waypoints. The control segment provides daily updates to the navigation messages broadcast from the satellites to maintain system precision in three dimensions to 16 meters (spherical error probable) worldwide. Additionally, GPS supports the United States Nuclear Detonation (NUDET) Detection System (USNDS) mission and provides strategic and tactical support to the following Department of Defense missions: Joint Operations by providing capabilities for Positioning, Navigation, and Timing (PNT); Command, Control, Communications, and Intelligence; Special Operations; Military Operations in Urban Terrain; Defense-Wide Mission Support; Air Mobility; and Space Launch Orbital Support.

GPS III Follow On (GPS IIIF) delivers improved satellites beyond the first ten space vehicles (SVs) being delivered by the GPS III program (funded in PE 1203265SF GPS III Space Segment). The GPS IIIF satellites maintain the same capabilities as the GPS III satellites, and also deliver significant enhancements to include: backward compatibility, Unified S-Band interface compliance, integration of hosted payloads including a redesigned USNDS payload, Laser Retro-reflector Arrays (LRAs), Search and Rescue/GPS (SAR/GPS), and Regional Military Protection (RMP) capabilities that provide the ability to deliver high-power regional Military Code signals in specific areas of intended effect. Implementation of RMP into the GPS Enterprise requires integration with the ground and user segments, executed by the GPS Next Generation Operational Control System and Military GPS User Equipment programs, respectively. The SAR/GPS payload provided by Canada fills a validated National Search and Rescue Committee requirement to provide an enduring, space-based distress alerting capability to detect, locate, and relay distress alerts to fulfill its responsibilities under international agreements for Search and Rescue. The LRA, built by the Naval Research Lab, is a passive reflector that improves accuracy and provides better ephemeris data. National Geospatial-Intelligence Agency funds the integration costs of the LRA.

GPS IIIF SVs 11 - 12 are in development and expected Available for Launch dates in FY27. Procurement of SVs 13 and 14 was awarded on October 7, 2020. Additionally, the GPS IIIF program office capitalized on a one-time only opportunity for economy of scale acquisition, via an Alternate Buy Strategy, that reduced total production costs with no expected impact to Acquisition Program Baseline milestones or planned on-orbit delivery of the SVs. SVs 15, 16, and 17 were awarded on October 22, 2021. GPS IIIF SVs 18, 19, and 20 were awarded on October 27, 2022.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: GPS03C / GPSIII Follow On
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203269SF	Other Related Program Elements: 1203269F
Line Item MDAP/MAIS Code: 590		

The FY 2022 Congressional add increased the FY 2022 procurement quantity to 3 GPS IIIF SVs and allowed SSC to stretch the GPS IIIF SV production line in FY 2023 and subsequently FY 2024. An FY 2024 gap in procurement will create the right-sized buy profile to end GPS IIIF SV procurement in FY 2030 as originally planned prior to the FY 2022 increase.

Funding for this exhibit is contained in PE 1203269SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
GPS03C / GPSIII Follow On

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 1203269SF **Other Related Program Elements:** 1203269F

Line Item MDAP/MAIS Code: 590

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	GPSIII Follow On	P-5a, P-21	B		6 / 1,408.580	2 / 616.962	- / 119.700	2 / 647.165	- / -	2 / 647.165
P-40	Total Gross/Weapon System Cost				6 / 1,408.580	2 / 616.962	- / 119.700	2 / 647.165	- / -	2 / 647.165

*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 FY 2022 Congressional add increased the FY 2022 procurement quantity to 3 GPS IIIF SVs and allowed SSC to stretch the GPS IIIF SV production line in FY 2023 and subsequently FY 2024. GPS IIIF SVs 18, 19, and 20 were awarded on October 27, 2022. An FY 2024 gap in procurement will create the right-sized buy profile to end GPS IIIF SV procurement in FY 2030 as originally planned.

FY 2025 funding provides acquisition of GPS IIIF SVs 21 and 22. Funding procures all resources necessary to maintain the current development and build schedules to support the planned GPS IIIF Available for Launch (AFL) dates. Funding also supports crosslink demonstration, enabling GPS IIIF to connect to Space Data Network (SDN) terminals, incrementally increasing the constellation's ability to remain healthy during conflict as well as rapidly respond to implement resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, etc.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: GPS03C / GPSIII Follow On	Item Number / Title [DODIC]: GPSIII Follow On
--	---	---

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	6	2	-	2	-	2
Gross/Weapon System Cost (\$ in Millions)	1,408.580	616.962	119.700	647.165	-	647.165
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,408.580	616.962	119.700	647.165	-	647.165
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,408.580	616.962	119.700	647.165	-	647.165

(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)	234.763	308.481	-	323.583	-	323.583

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

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
Space Vehicle - GPSIII Follow On Cost																		
Recurring Cost																		
GPS III ^(t)	260.268	5	1,301.340	271.524	2	543.048	-	-	72.438	288.546	2	577.091	-	-	-	288.546	2	577.091
GPS III ^F Crosslinks	-	-	-	-	-	-	-	-	-	-	-	16.965	-	-	-	-	-	16.965
GPS III ^F CGR-FFRDC	-	-	-	-	-	-	-	-	-	-	-	0.647	-	-	-	-	-	0.647
GPS III ^F Enterprise SE&I	-	-	15.672	-	-	4.574	-	-	14.803	-	-	9.950	-	-	-	-	-	9.950
GPS III ^F Technical Mission Analysis	-	-	11.735	-	-	11.004	-	-	6.213	-	-	6.332	-	-	-	-	-	6.332
GPS III ^F Associated Product Procurement	-	-	-	-	-	3.600	-	-	-	-	-	2.956	-	-	-	-	-	2.956
GPS III ^F Launch Services	-	-	-	-	-	-	-	-	-	-	-	13.786	-	-	-	-	-	13.786
<i>Subtotal: Recurring Cost</i>	-	-	1,328.747	-	-	562.226	-	-	93.454	-	-	627.727	-	-	-	-	-	627.727
<i>Subtotal: Space Vehicle - GPSIII Follow On Cost</i>	-	-	1,328.747	-	-	562.226	-	-	93.454	-	-	627.727	-	-	-	-	-	627.727
Support - GPSIII Follow On Cost																		
GPS III ^F FFRDC	-	-	17.991	-	-	7.394	-	-	3.209	-	-	3.311	-	-	-	-	-	3.311
GPS III ^F A&AS	-	-	60.958	-	-	45.858	-	-	19.449	-	-	12.539	-	-	-	-	-	12.539
GPS III ^F Other Support	-	-	0.884	-	-	1.484	-	-	3.588	-	-	3.588	-	-	-	-	-	3.588
<i>Subtotal: Support - GPSIII Follow On Cost</i>	-	-	79.833	-	-	54.736	-	-	26.246	-	-	19.438	-	-	-	-	-	19.438
Gross/Weapon System Cost	234.763	6	1,408.580	308.481	2	616.962	-	-	119.700	323.583	2	647.165	-	-	-	323.583	2	647.165

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: GPS03C / GPSIII Follow On	Item Number / Title [DODIC]: GPSIII Follow On
ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:	

(†) indicates the presence of a P-5a

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: GPS03C / GPSIII Follow On	Item Number / Title [DODIC]: GPSIII Follow On
--	---	---

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
GPS III ^(†)		2021	Lockheed Martin / Littleton, CO	C / FPIF	SSC, LA AFB, CA	Oct 2020	Mar 2028	2	277.083	N	Sep 2020	
GPS III ^(†)		2022	Lockheed Martin / Littleton, CO	C / FPIF	SSC, LA AFB, CA	Oct 2021	Jun 2029	3	257.575	N	Sep 2021	
GPS III ^(†)		2023	Lockheed Martin / Littleton, CO	C / FPIF	SSC, LA AFB, CA	Oct 2022	Jul 2030	2	271.524	N	Sep 2022	
GPS III ^(†)		2025	Lockheed Martin / Littleton, CO	C / FPIF	SSC, LA AFB, CA	Oct 2024	Oct 2030	2	288.546	N	Sep 2024	

^(†) indicates the presence of a P-21

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: GPS03C / GPSIII Follow On	Item Number / Title [DODIC]: GPSIII Follow On
--	---	---

Cost Elements <i>(Units in Each)</i>							Fiscal Year 2021														Fiscal Year 2022														BALANCE
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021														Calendar Year 2022														
							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					
GPS III F																																			
	1	2021	AF	2	0	2	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2						
	1	2022	AF	3	0	3													A	-	-	-	-	-	-	-	-	-	3						
	1	2023	AF	2	0	2																							2						
	1	2025	AF	2	0	2																							2						

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** GPS03C / GPSIII Follow On **Item Number / Title [DODIC]:** GPSIII Follow On

Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023														Fiscal Year 2024														BALANCE
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023														Calendar Year 2024														
							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					
GPS IIIF																																			
	1	2021	AF	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2						
	1	2022	AF	3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3						
	1	2023	AF	2	0	2	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2						
	1	2025	AF	2	0	2																							2						
							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					

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** GPS03C / GPSIII Follow On **Item Number / Title [DODIC]:** GPSIII Follow On

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2025													Fiscal Year 2026													BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025													Calendar Year 2026													
							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			
GPS III F																																	
	1	2021	AF	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
	1	2022	AF	3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
	1	2023	AF	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
	1	2025	AF	2	0	2	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
							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			

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** GPS03C / GPSIII Follow On **Item Number / Title [DODIC]:** GPSIII Follow On

Cost Elements <i>(Units in Each)</i>							Fiscal Year 2029														Fiscal Year 2030														BALANCE
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2028	BAL DUE AS OF 1 OCT	Calendar Year 2029														Calendar Year 2030														
							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					
GPS III F																																			
1		2021	AF	2	2	0																							0						
1		2022	AF	3	0	3	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	0						
1		2023	AF	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1						
1		2025	AF	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2						
							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					

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** GPS03C / GPSIII Follow On **Item Number / Title [DODIC]:** GPSIII Follow On

Cost Elements <i>(Units in Each)</i>							Fiscal Year 2031														Fiscal Year 2032														BALANCE
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2030	BAL DUE AS OF 1 OCT	Calendar Year 2031														Calendar Year 2032														
							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					
GPS III F																																			
1		2021	AF	2	2	0																							0						
1		2022	AF	3	3	0																							0						
1		2023	AF	2	1	1	-	-	1																				0						
1		2025	AF	2	0	2	1	-	-	-	1																		0						
							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					

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: GPS03C / GPSIII Follow On	Item Number / Title [DODIC]: GPSIII Follow On
--	---	---

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2025	1-8-5 For 2025	MAX For 2025	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 - Littleton, CO	1	2	4	0	1	72	73	0	0	0	0

"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).

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: GPSIII / GPS III Space Segment
---	--

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203265SF	Other Related Program Elements: 1203265F
--	---	---

Line Item MDAP/MAIS Code: 590

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	108.598	103.340	121.770	68.205	-	68.205	29.723	2.812	0.000	0.000	0.000	434.448
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	108.598	103.340	121.770	68.205	-	68.205	29.723	2.812	0.000	0.000	0.000	434.448
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	108.598	103.340	121.770	68.205	-	68.205	29.723	2.812	0.000	0.000	0.000	434.448

(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 Global Positioning System (GPS) is a space-based navigation system that fills validated Joint Service requirements for worldwide, accurate, common grid three dimensional positioning/navigation for military aircraft, ships, and ground personnel. The consistent accuracy, unaffected by location or weather and available in real time, significantly improves effectiveness of reconnaissance, weapons delivery, mine countermeasures and rapid deployment for all services. GPS must comply with Title 10 United States Code (USC) Sec. 2281, which requires that the Secretary of Defense ensures the continued sustainment and operation of GPS for military and civilian purposes, and 51 USC Sec. 50112, which requires that GPS complies with certain standards and facilitates international cooperation.

The system is composed of three programs: User Equipment (funded under Program Element (PE) 1203164F, 1203164SF), Space (funded under PE 1203165F, 1203265F, 1203265SF, 1203269F, and 1203269SF), and a Control Network (funded under PE 1206423F, 1206423SF and 1203165F). The satellites broadcast high accuracy data using precisely synchronized signals that are received and processed by user equipment installed in military platforms. The user equipment computes the platform position and velocity and provides steering vectors to target locations or navigation waypoints. The control segment provides daily updates to the navigation messages broadcast from the satellites to maintain system precision in three dimensions to 16 meters (spherical error probable) worldwide. Additionally, GPS supports the United States Nuclear Detonation Detection System mission and provides strategic and tactical support to the following Department of Defense missions: Joint Operations by providing capabilities for Positioning, Navigation, and Timing (PNT); Command, Control, Communications, and Intelligence; Special Operations; Military Operations in Urban Terrain; Defense-Wide Mission Support; Air Mobility; and Space Launch Orbital Support.

GPS III is the next generation of Space Vehicles (SV) supporting the GPS constellation. GPS III SVs deliver significant enhancements, including a new international civil (L1C) Galileo-compatible signal, and enhanced anti-jam power. GPS III SVs 06-10 are in the Production and Deployment Phase.

The Air Force GPS directorate received USD(AT&L) approval to purchase GPS III SVs 09-10 at the December 2014 Defense Acquisition Board in order to sustain the constellation while competitive options were pursued. The GPS III SVs 09-10 purchases are on the current Lockheed Martin contract as technical equivalents of SVs 01-08. SV 09 is funded with FY 2014 Missile Procurement, Air Force (MPAF) advance procurement and FY 2015 MPAF regular procurement. SV 10 is funded with FY 2015 MPAF advance procurement, and FY 2016 Space Procurement, AF regular procurement.

SV 01 and SV 02 were successfully launched in December 2018 and August 2019, respectively. SV 01 was operationally accepted in January 2020 and SV 02 was operationally accepted in March 2020. SV 03 was successfully launched in June 2020 and operationally accepted in July 2020. SV 04 was successfully launched in November 2020 and operationally accepted in December 2020. SV 05 was successfully launched and operationally accepted in June 2021. SV 06 was successfully launched and operationally accepted in January 2023. SV 07 achieved Available for Launch (AFL) in May 2021 and has a projected

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: GPSIII / GPS III Space Segment
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203265SF	Other Related Program Elements: 1203265F

Line Item MDAP/MAIS Code: 590

Initial Launch Capability (ILC) in FY 2024. SV 08 achieved AFL in June 2021 and has a projected ILC in FY 2025. SV 09 achieved AFL in August of 2022 and SV 10 achieved AFL in December 2022. Funding supported the SV 06 launch and will support an SV 07 projected launch in FY 2024, SV08-09 projected launch in FY2025, and a SV10 projected launch in FY 2026.

Funding for this exhibit is contained in PE 1203265SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs **P-1 Line Item Number / Title:** GPSIII / GPS III Space Segment

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** 1203265SF **Other Related Program Elements:** 1203265F

Line Item MDAP/MAIS Code: 590

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	GPS III Space Segment		B		- / 108.598	- / 103.340	- / 121.770	- / 68.205	- / -	- / 68.205
P-40	Total Gross/Weapon System Cost				- / 108.598	- / 103.340	- / 121.770	- / 68.205	- / -	- / 68.205

*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:
 FY 2025 funding will procure independent technical and integration support critical to managing SVs 07-10. Funding supports SV 07 Operational 365 Days On-Orbit Incentive Milestone and SV 08 Launch, On-Orbit Checkout, Declared Operational On-Orbit Incentive Milestones. Funding also supports SVs 08-10 storage, mission readiness testing, mission assurance activities, launch preparation events and SV 08-09 planned ILC in FY 2025, and SV10 planned ILC in FY2026. Finally, funding supports the ability to rapidly respond to implement resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, etc.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: GPSIII / GPS III Space Segment	Item Number / Title [DODIC]: GPS III Space Segment
--	--	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	108.598	103.340	121.770	68.205	-	68.205
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	108.598	103.340	121.770	68.205	-	68.205
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	108.598	103.340	121.770	68.205	-	68.205

(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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
Space Vehicle - GPS III Space Segment Cost																		
Recurring Cost																		
GPS III SV03-10	-	-	25.049	-	-	43.956	-	-	43.725	-	-	27.388	-	-	-	-	-	27.388
GPS III CGR FFRDC	-	-	-	-	-	-	-	-	-	-	-	0.068	-	-	-	-	-	0.068
GPS III SV03-10 Enterprise SE&I	-	-	1.007	-	-	3.959	-	-	3.939	-	-	2.320	-	-	-	-	-	2.320
GPS III SV03-10 Technical Mission Analysis	-	-	3.781	-	-	2.924	-	-	5.991	-	-	2.605	-	-	-	-	-	2.605
<i>Subtotal: Recurring Cost</i>	-	-	29.837	-	-	50.839	-	-	53.655	-	-	32.381	-	-	-	-	-	32.381
<i>Subtotal: Space Vehicle - GPS III Space Segment Cost</i>	-	-	29.837	-	-	50.839	-	-	53.655	-	-	32.381	-	-	-	-	-	32.381
Checkout and Launch - GPS III Space Segment Cost																		
GPS III SV03-10 Launch Services	-	-	29.225	-	-	43.721	-	-	30.884	-	-	19.032	-	-	-	-	-	19.032
GPS III SV03-10 On-Orbit/Mission Success Incentive	-	-	19.922	-	-	0.243	-	-	15.000	-	-	9.623	-	-	-	-	-	9.623
GPS III SV03-10 Storage and MRT	-	-	15.658	-	-	0.000	-	-	13.700	-	-	1.141	-	-	-	-	-	1.141
<i>Subtotal: Checkout and Launch - GPS III Space Segment Cost</i>	-	-	64.805	-	-	43.964	-	-	59.584	-	-	29.796	-	-	-	-	-	29.796
Support - GPS III Space Segment Cost																		
GPS III SV 03-10 FFRDC	-	-	6.052	-	-	1.272	-	-	2.604	-	-	1.132	-	-	-	-	-	1.132

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force												Date: March 2024					
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10						P-1 Line Item Number / Title: GPSIII / GPS III Space Segment						Item Number / Title [DODIC]: GPS III Space Segment					
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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
GPS III SV 03-10 A&AS	-	-	7.343	-	-	7.025	-	-	5.477	-	-	4.656	-	-	-	-	-	4.656
GPS III SV 03-10 Other Support	-	-	0.561	-	-	0.240	-	-	0.450	-	-	0.240	-	-	-	-	-	0.240
<i>Subtotal: Support - GPS III Space Segment Cost</i>	-	-	13.956	-	-	8.537	-	-	8.531	-	-	6.028	-	-	-	-	-	6.028
Gross/Weapon System Cost	-	-	108.598	-	-	103.340	-	-	121.770	-	-	68.205	-	-	-	-	-	68.205

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: GPSSPC / Global Positioning (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: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	4.530	0.947	0.893	0.835	-	0.835	0.883	0.834	0.852	0.870	-	10.644
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	4.530	0.947	0.893	0.835	-	0.835	0.883	0.834	0.852	0.870	-	10.644
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	4.530	0.947	0.893	0.835	-	0.835	0.883	0.834	0.852	0.870	-	10.644

(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.

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. Similar work for the Military GPS User Equipment (MGUE) is in the planning phase.

Funding for this exhibit is contained in 1203164SF.

Justification:

KEY DATA LOADING INSTALLATION FACILITY (KLIF)/GPS SECURITY DEVICE: FY 2025 funding provides for the programming of black key (cryptographic) Algorithms and Initialization Parameters into the SAASM, providing an accurate positioning solution for GPS users using security equipment. Funding will procure support for SAASM Key Data Processors (KDP) based User Equipment programming, ensuring uninterrupted support to SAASM developers. SAASM developers are required to integrate the government-provided KDP as part of the SAASM security architecture of GPS User Equipment.

Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to, program office support, studies, technical analysis, etc.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: HRTG00 / HERITAGE TRANSITION
--	--

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203605SF	Other Related Program Elements: N/A
--	---	--

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	7.218	1.896	6.110	0.000	-	0.000	0.000	0.000	0.000	0.000	-	15.224
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	7.218	1.896	6.110	0.000	-	0.000	0.000	0.000	0.000	0.000	-	15.224
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	7.218	1.896	6.110	0.000	-	0.000	0.000	0.000	0.000	0.000	-	15.224

(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:

Command and Control System-Consolidated (CCS-C) is an Acquisition Category II program providing consolidated command and control (C2) capability for Milstar, Defense Satellite Communications Systems (DSCS), Advanced Extremely High Frequency (AEHF) and Wideband Global SATCOM (WGS) Military Satellite Communications (MILSATCOM) missions. CCS-C has C2 capability for future satellites as well. CCS-C is operated by the United States Space Force (USSF). In CY 2018, Air Force Space Command (AFSPC) mandated that all satellite programs use common platform C2 services to support spacecraft operations through use of standards and utilization of services-based applications. Heritage Transition (HRTG) modernizes CCS-C utilizing current computer technology necessary for a common, cloud enabled ground architecture. This is done by procuring software modifications to existing services and mission unique capabilities required to support Satellite Control Network (SCN) based SATCOM C2 systems.

This modernization also enables CCS-C to use an enterprise platform for satellite control through Wideband Satellite Operations Management System Network (WSOMSNet) and Global Satellite Command and Control Elements (GSCCE) to communicate with WGS satellites. HRTG was a New Start in FY 2022. HRTG enables adaptive and robust SATCOM C2 by modernizing the system to a more agile service-oriented architecture and providing an integrated cyber defense posture. HRTG includes utilizing common messaging schemas to enable increased situational awareness for space warfighters on a common infrastructure. HRTG provides the software and hardware modifications required to ensure the operational CCS-C system is modernized. There is no increase in performance envelope associated with this effort. These mission-specific efforts will be used to migrate CCS-C into a common platform and increased use of electronic interfaces. HRTG will fund efforts to provide the foundational cyber-secure platform and applications enabling capability migration off antiquated CCS-C architecture.

Funding for this exhibit is contained in PE 1203605SF.

Justification:

No FY 2025 funding requested.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: JTAGS0 / Joint Tactical Ground Stations
---	---

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 1208053SF
---	--	---

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	0.000	0.580	0.000	-	0.000	0.000	0.000	0.000	0.000	-	0.580
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	0.000	0.580	0.000	-	0.000	0.000	0.000	0.000	0.000	-	0.580
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	0.000	0.580	0.000	-	0.000	0.000	0.000	0.000	0.000	-	0.580

(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 Joint Tactical Ground Station (JTAGS) disseminates near real time warning, alerting, and cueing information on ballistic missile launches and other tactical events of interest throughout the theater using existing communication networks, providing critical support to Combatant Commanders in their Areas of Responsibility (AOR). JTAGS, first fielded in 1997, has four outside the contiguous United States (OCONUS) deployed JTAGS units, which are deployed in three theaters (INDOPACOM, CENTCOM, EUCOM). A fifth contiguous United States (CONUS) system is used as an institutional trainer though is available as a deployable asset. Obsolescence issues coupled with the requirement to be compatible with the Air Force's newer satellites (Space Based Infrared System (SBIRS)) and their improved warning accuracy and timeliness, resulted in the production/fielding of the JTAGS Block II Pre-Planned Product Improvement (P3I) system. The JTAGS Approved Acquisition Objective (AAO) is five systems. Four OCONUS deployed JTAGS units, which are deployed in three theaters (United States Indo-Pacific Command (USINDOPACOM), United States Central Command (USCENTCOM), United States European Command (USEUCOM)), constitute DoD's in-theater system providing space-based missile warning. The fifth CONUS system is used as an institutional trainer but is available as a deployable asset. JTAGS is designated as the in-theater element of the United States Strategic Command's Theater Event System (TES), supporting all Theater Missile Defense pillars, affording the shortest sensor-to-shooter connectivity.

Funding for this exhibit contained in PE 1208053SF.

Justification:

No FY 2025 funding requested.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: MC0MSE / Spaceborne Equip (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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	29.587	83.168	83.829	-	83.829	84.623	87.450	90.165	91.981	-	550.803
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	29.587	83.168	83.829	-	83.829	84.623	87.450	90.165	91.981	-	550.803
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	29.587	83.168	83.829	-	83.829	84.623	87.450	90.165	91.981	-	550.803

(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 Communications Security (COMSEC) procures centrally-funded cryptographic products to operate in the space environment and for ground nodes that link to space assets. Space COMSEC equipment is a foundational element in achieving space information superiority. Space COMSEC provides cybersecurity (confidentiality, integrity, and availability) for Department of Defense (DOD) satellite platforms. Space COMSEC is an enabler for space system compliance with CNSSP No. 12 - Cybersecurity Policy of Space Systems Used to Support National Security Missions. Space COMSEC provides products and lifecycle sustainment support to all DoD satellite systems and commercial systems supporting DOD missions. The Air Force, Space Force, DOD, and Intelligence Community require the capability to secure, collect, process, store, and disseminate an uninterrupted flow of information, while denying an adversary the ability to intercept, collect, destroy, interpret, or manipulate our information flows. Secure communication allows the DOD to achieve and maintain decision superiority, the key to successful application of the military instrument of national power in modern, high-tempo, full-spectrum operations. Space COMSEC equipment protects information such as warfighter positions, mission planning, target strikes, commanders' orders, intelligence, force strength, and force readiness. When an adversary is capable of interpretation, manipulation, or destruction of the information used by the warfighter, DoD military forces will suffer significant and/or devastating mission degradation that can result in loss of life and resources and/or exceptionally grave damage to national security. Space COMSEC enables secure Command and Control (C2) of satellites and prevents unauthorized access and destruction. It enables secure transmission of satellite systems' health and 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. Space COMSEC also provides secure transmission of information collected by satellite sensors (mission data), 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 procures crypto end items and logistics elements to support developing and operational space systems. The Space Modular Common Cryptography (SMCC) Program of Record procures a family of common cryptography (crypto) solutions that integrate Telemetry, Tracking, and Command (TT&C), Mission Data (MD), and Transmission Security (TRANSEC) key stream functions for the Air Force, Space Force, DoD, and Intelligence Community space systems. The SMCC Program's mission is to secure communication links and the data transmitted, incorporate standard interfaces that leverage existing technologies, provide a basis for future technologies, and design solutions that are scalable, upgradeable, and reconfigurable.

Funding for this exhibit contained in program element (PE) 1203140SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
MCOMSE / Spaceborne Equip (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

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Spaceborne Equip (Comsec)	P-5a	A		- / -	- / 29.587	- / 83.168	- / 83.829	- / -	- / 83.829
P-40	Total Gross/Weapon System Cost				- / -	- / 29.587	- / 83.168	- / 83.829	- / -	- / 83.829

*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. Space Communications Security (COMSEC): Procures centrally-funded cryptographic products to operate in the space environment and for ground nodes that link to space assets. 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), Embedded 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. Each year the types and quantities of items vary to meet requirements; an Average Unit Cost is used. 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. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements. Contractor support costs are included as part of the Space COMSEC products funding line in order to provide for end item operational capability. Due to the pacing threat from our strategic competitors, FY24 and FY25 funding significantly increased to address USSF's growing requirement for a more proliferated and resilient architecture and the Department of the Air Force's (DAF) priority to fully fund Space COMSEC.

a. Logistics: FY25 funding provides for higher contracting costs and growing Space Force and Air Force Space COMSEC requirements. Space COMSEC products typically have a 20 to 40 year lifecycle to support development, launch and operation of multiple Air Force, Space Force, 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 and are organically sustained to include component level maintenance exclusively by the Air Force. Logistics procures the necessary lifecycle sustainment elements required to meet the 40 year mission requirements. Logistics elements include, but not limited to, specialized test sets, certified training materials and courses, maintenance manuals, provisioning, spare components, and modifications. Contractor support costs are included as part of the Space COMSEC logistics funding line in order to provide for end item operational capability.

b. Aerospace Vehicle Equipment (AVE) Products: FY25 funding provides Telemetry, Tracking, and Command (TT&C) and mission data cryptographic products to operate in the space environment. AVE procurement of reduced size, weight, and power space qualified satellite cybersecurity COMSEC products supports development, integration, launch and operations in DOD National Security Space System's LargeSat, SmallSat, CubeSat, and hosted payload applications. FY24 and FY25 funding significantly increased to address USSF's growing requirement for a more proliferated and resilient architecture and the Department of the Air Force's (DAF) priority to fully fund Space COMSEC.

c. Ground Operating Equipment (GOE) Products: FY25 funding provides cryptographic products for ground nodes which link to space satellite National Security Space System satellite platforms. GOE provides the procurement of ground equipment with corresponding space algorithms required to communicate with DOD satellite systems. Procurement of Telemetry, Tracking, and Command (TT&C), Mission Data and Satellite Communication (SATCOM) cybersecurity ground application COMSEC products enable secure command and control and secure data transmission protecting DOD space systems' capabilities (Position, Navigation, Timing, Early Warning, SATCOM, Remote Sensing, and Intelligence, Surveillance and Reconnaissance). FY24 and FY25 funding significantly increased to address USSF's growing requirement for a more proliferated and resilient architecture and Department of the Air Force's (DAF) priority to fully fund Space COMSEC.

2. Space Modular Common Cryptography (SMCC): Reduces space programs development and life cycle costs by providing a common, modular and upgradable cryptographic solution set. SMCC is fully endorsed by NSA as the preferred solution for all emerging National Security Space Systems. The SMCC Program awarded a 5-year production contract in FY21 to procure Common Crypto Solutions for Air Force, Space Force, DOD, and Intelligence Community Space Programs. FY23 funding provided for the production of SMCC units for satellite programs including GPS IIF and Next Generation Geosynchronous-

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: MC0MSE / Spaceborne Equip (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		
Overhead Persistent Infrared (NGG-OPIR). SMCC meets NSA mandated space algorithm transition/ modernization guidance to mitigate evolving threats/vulnerabilities and will provide modernized cryptographic capabilities. No FY25 funding requested.		

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MCOMSE / Spaceborne Equip (Comsec)	Item Number / Title [DODIC]: Spaceborne Equip (Comsec)
--	--	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	29.587	83.168	83.829	-	83.829
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	29.587	83.168	83.829	-	83.829
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	29.587	83.168	83.829	-	83.829

(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)	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - 1. Space Communications Security (COMSEC) (PE 1203140SF) Cost																		
Recurring Cost																		
a. Logistics	-	-	-	1.065	3	3.195	2.000	4	8.000	2.000	4	8.000	-	-	-	2.000	4	8.000
b. AVE ^(†)	-	-	-	0.468	26	12.160	0.345	111	38.345	0.345	111	38.295	-	-	-	0.345	111	38.295
c. GOE ^(†)	-	-	-	0.056	169	9.432	0.060	611	36.823	0.061	611	37.534	-	-	-	0.061	611	37.534
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	24.787	-	-	83.168	-	-	83.829	-	-	-	-	-	83.829
<i>Subtotal: Hardware - 1. Space Communications Security (COMSEC) (PE 1203140SF) Cost</i>	-	-	-	-	-	24.787	-	-	83.168	-	-	83.829	-	-	-	-	-	83.829
Hardware - 2. Space Modular Common Crypto (SMCC) (PE 1203140SF) Cost																		
Recurring Cost																		
SMCC	-	-	-	1.200	4	4.800	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	4.800	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - 2. Space Modular Common Crypto (SMCC) (PE 1203140SF) Cost</i>	-	-	-	-	-	4.800	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	29.587	-	-	83.168	-	-	83.829	-	-	-	-	-	83.829

Remarks:
Space COMSEC equipment is an aggregation of various units at various prices. Average Unit Cost is used.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MCOMSE / Spaceborne Equip (Comsec)	Item Number / Title [DODIC]: Spaceborne Equip (Comsec)
ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:	
^(†) indicates the presence of a P-5a		

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MC0MSE / Spaceborne Equip (Comsec)	Item Number / Title [DODIC]: Spaceborne Equip (Comsec)
--	--	--

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
b. AVE		2023	MULTIPLE / MULTIPLE	Various	JBSA-Lackland	Jun 2023	Aug 2024	26	0.468	Y		
b. AVE		2024	MULTIPLE / MULTIPLE	Various	JBSA-Lackland	Jun 2024	Aug 2025	111	0.345	Y		
b. AVE		2025	MULTIPLE / MULTIPLE	Various	JBSA-Lackland	Jun 2025	Aug 2026	111	0.345	Y		
c. GOE		2023	MULTIPLE / MULTIPLE	Various	AFMC	May 2023	Jul 2024	169	0.056	Y		
c. GOE		2024	MULTIPLE / MULTIPLE	Various	AFMC	Jul 2024	Aug 2025	611	0.060	Y		
c. GOE		2025	MULTIPLE / MULTIPLE	Various	JBSA-Lackland	Jun 2025	Aug 2026	611	0.061	Y		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date: March 2024**

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: MILSAT / MILSATCOM
--	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.494	29.333	44.672	37.684	-	37.684	42.018	43.102	33.348	34.161	-	264.812
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.494	29.333	44.672	37.684	-	37.684	42.018	43.102	33.348	34.161	-	264.812
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.494	29.333	44.672	37.684	-	37.684	42.018	43.102	33.348	34.161	-	264.812

(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:

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 commanders, uniformed services and defense agencies. To enable this support, this program funds the three efforts.

AIR FORCE WIDEBAND ENTERPRISE TERMINALS (AFWET): The Modernization of Enterprise Terminals (MET) features large bandwidth capable satellite communications in X-band, Ka-band, frequencies including dual-band, and simultaneous X and Ka-band, to support U.S. DoD, allied, and government requirements utilizing the Wideband Global Satellite (WGS) and commercial satellites. As joint assets, these terminals make up part of the Global Information Grid, which provides worldwide, wideband SATCOM capabilities or strategic and tactical command, control, communications and intelligence, surveillance, and reconnaissance to users. The METs are the backbone of the Department of Defense Information Network (DoDIN) and its users include the communication requirements of the SECDEF, Department of State, U.S. strategic and tactical forces, Missile Defense Agency (MDA), and NATO allies. 29 Terminals Commissioned to date (25 METs, 3 Deployable Ku-band Earth Terminal (DKETs) & 1 Ku-band terminal). The United States Space Force (USSF) is responsible for terminal equipment at Space Force operated and maintained Enterprise ground terminal locations.

GLOBAL BROADCAST SERVICE (GBS): This Space Force-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 intelligence products (full motion video, imagery, data) to garrisoned, deployed or moving forces. GBS Receive Suites provide lower-echelon United States Air Force (USAF) users with efficient high-data-rates via satellite-hosted GBS packages. GBS Procurement funding includes the necessary updates to address two GBS limitations, Transmission Security (TRANSEC) and Contested, Degraded and Operationally-Limited (CDO) capabilities. First, National Security Agency (NSA), via the Committee on National Security Systems (CNSS) Policy 12 and CNSS instruction 1200, requires U.S. Government agencies to employ TRANSEC systems to protect information transmitted/received by National Security Space (NSS) systems. Second, the Chief Space Operations' (CSO) SATCOM Vision mandates a SATCOM Enterprise that can operate through a CDO environment. Army-Air Force Anti-Jam Modem (A3M) delivers TRANSEC and Anti-Jam capabilities required to address both GBS' limitations. Full procurement and fielding of the dual-compatible Protected Tactical Waveform (PTW) and legacy Digital Video Broadcast - Second Generation Satellite (DVB-S2) protected modems will continue in FY 2025.

A3M: Space Systems Command (SSC) is procuring and fielding Protected Tactical Waveform (PTW) capable modems to meet the Ground Multiband Terminal (GMT) and other Tactical SATCOM mission requirements. The A3M is the program of record for development, procurement, and fielding of the PTW capability. The United States Space Force (USSF) is teamed with the Army to expand the competitive industry base and gain volume cost savings of a common Line Replaceable Unit (LRU) modem. The A3M modem will provide high throughput and enhanced anti-jam capability in benign and contested environments to prevent the disruption of communications from electronic jamming at identified threat levels of the WGS Operational Requirements Document (ORD). The A3M modem meets the Internet

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: MILSAT / MILSATCOM
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		
<p>Protocol (IP) mandate is forward compatible with the future Protected Tactical SATCOM (PTS), and contains a NSA certified End Cryptographic Unit (ECU). The A3M modem integrates into the GMT and other Tactical SATCOM terminals in operation using industry standard interfaces and is operator configurable to the different antenna sizes currently in operation.</p> <p>A3M Procurement funding includes depot tooling, continues establishment of the Key Loading and Initialization Facility (KLIF), procures equipment to support a systems integration checkout capability (i.e. Systems Integration Lab (SIL)), and Interim Contractor Support (ICS). Funding for depot tooling includes but not limited to workstations, fixtures, or any other equipment that may be used for intake, rework, restock and testing of A3M LRU modems. The KLIF is used to initialize and restore the modem with NSA provided cryptologic keys before being sent to the field. The SIL is used to test changes in software or Tactics, Techniques and Procedures (TTPs) on real terminals and modems, but in a laboratory environment, before making changes to fielded systems. Funding also purchases additional Protected Tactical Enterprise Service (PTES) KLIF Host equipment, A3M warehousing equipment, shipping containers, and A3M test equipment and repair work spaces. Funding covers shipping of A3M cases to field units and return shipping of un-modified GMT equipment cases and fielding support. A3M purchases and delivers technical data and initial spares in a combination of spare modems and subassembly parts equivalent to 10% sparing. A3M's Indefinite Quantity Indefinite Delivery (IDIQ) contract enables future fielding for additional SATCOM users.</p> <p>PROLIFERATED LEO (pLEO) GROUND: SSC, in partnership with other organizations, is providing proliferated LEO capabilities to DoD and IC users using the Starshield constellation. SSC will field ground entry terminals and ground bounce terminals as part of the resilient communications and redundant pathway for space-based data transport. SSC procured Starshield ground entry terminals will facilitate high bandwidth mil-Ka backhaul of Starshield data and represents 10 of the 18 terminals planned for Starshield. The 10 terminals enable site diversification and latency reduction of worldwide DoD and IC data transported by Starshield. Ground bounce terminals provide high bandwidth transfer of crucial data from co-located DoD satellite ground stations into the Starshield and Starlink constellations. These 6 sites will be established at vulnerable OCONUS sites and ensure continuous connectivity to CONUS based space operations centers.</p> <p>Funding for this exhibit is contained in Program Element (PE) 1203601SF MILSATCOM TERMINALS.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
MILSAT / MILSATCOM

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

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	AFWET		A		- / -	- / 11.962	- / 20.969	- / 3.402	- / -	- / 3.402
P-5	GBS		A		- / 0.494	- / 0.000	- / 7.068	- / 10.130	- / -	- / 10.130
P-5	PTW Modems		B		- / -	- / 17.371	- / 16.635	- / 7.063	- / -	- / 7.063
P-5	SDN GEPs		A		- / -	- / -	- / -	- / 17.089	- / -	- / 17.089
P-40	Total Gross/Weapon System Cost				- / 0.494	- / 29.333	- / 44.672	- / 37.684	- / -	- / 37.684

*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:
 AFWET: In FY 2025, funding will extend the life of the system, modernize operational suitability, safety and effectiveness, and maintain high interoperability with other DoD, Army, Navy, and Air Force strategic and tactical terminals to include mobile capability.

AFWET Terminal Modernization includes engineering, site preparation, terminal and radome installation, integration, acceptance testing and funding initial spares. Full Operational Capability (FOC) was achieved in August 2023, one month ahead of the objective date of September 2023.

AFWET Maintenance Upgrades and Sustainment includes: 52B Terminal installations, radome modifications and installations, legacy deinstallations, power and communication infrastructure, Interconnect Facility (ICF) installations which 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 Defense Information Systems Agency (DISA) and National Security Agency directives and more efficient and effective usage of satellite resources for jam-resistant and anti-scintillation wideband links.

AFWET Product Support includes: SATCOM Modernization Services (SMS) skillsets required for specialized SATCOM fielding and training supporting Terminal Modernization.

AFWET Other Support includes: Advisory and Assistance Services (A&AS), system engineering, and other related activities supporting successful program execution.

GBS: FY 2025 funding will continue to procure the required quantity of A3M modems for USAF and USSF users of the GBS as aligned with the A3M production schedule. The A3M enables GBS Receive Suites used by U.S. warfighters to continue receiving high-volume, real time intelligence products (e.g., high-definition full motion video drone feeds) in contested environments. The A3M also ensures NSA and ORD requirements for TRANSEC are met.

A3M: FY 2025 effort includes ICS for fielding and installing PTW Modems into multiple types of tactical terminals, and distribution of the modems to the needs of GMT USSF users, USAF users, and coalition partners.

A3M support costs includes: systems engineering support, integration and testing, other related activities supporting modem production, installation and fielding, and successful program execution.

pLEO Ground: FY 2025 funding will procure, install, and operationalize three pLEO ground sites. Terminal costs include unit costs, shipment, and manufacturer onsite support. Civil costs are associated with fees and studies, land preparation, and actual install and connection costs. Support includes systems engineering support, onsite deployment, integration and testing, and other related activities including planning, installation, fielding, and successful program execution.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: MILSAT / MILSATCOM
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		

FY 2025 funding will allow the program to rapidly respond to implement system resiliency and situational awareness necessary to operate through the contested space domain. Activities may include, but are not limited to, program office support, studies, technical analysis, etc.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force						Date: March 2024			
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10				P-1 Line Item Number / Title: MILSAT / MILSATCOM			Item Number / Title [DODIC]: AFWET		
ID Code (A=Service Ready, B=Not Service Ready) : A						MDAP/MAIS Code:			
Resource Summary				Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)				-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)				-	11.962	20.969	3.402	-	3.402
Less PY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)				-	11.962	20.969	3.402	-	3.402
Plus CY Advance Procurement (\$ in Millions)				-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)				-	11.962	20.969	3.402	-	3.402
<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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - AFWET Cost																		
Recurring Cost																		
Terminal Modernization	-	-	-	-	-	2.774	-	-	-	-	-	-	-	-	-	-	-	-
Install/Deinstall	-	-	-	-	-	-	-	-	4.703	-	-	-	-	-	-	-	-	-
Engineering/Integration (E&I)	-	-	-	-	-	-	-	-	1.283	-	-	-	-	-	-	-	-	-
Post Modernization of Enterprise Terminals (MET) Equipment	-	-	-	-	-	-	-	-	10.980	-	-	-	-	-	-	-	-	-
Maintenance Upgrade/Sustainment	-	-	-	-	-	4.492	-	-	-	-	-	-	-	-	-	-	-	-
Product Support	-	-	-	-	-	2.594	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	9.860	-	-	16.966	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - AFWET Cost</i>	-	-	-	-	-	9.860	-	-	16.966	-	-	-	-	-	-	-	-	-
Support - AFWET Cost																		
Advisory and Assistance Services (A&AS)	-	-	-	-	-	0.733	-	-	0.989	-	-	1.017	-	-	-	-	-	1.017
SATCOM Modernization Services (SMS)	-	-	-	-	-	-	-	-	2.124	-	-	1.970	-	-	-	-	-	1.970
Other Government Costs	-	-	-	-	-	1.369	-	-	0.890	-	-	0.415	-	-	-	-	-	0.415
<i>Subtotal: Support - AFWET Cost</i>	-	-	-	-	-	2.102	-	-	4.003	-	-	3.402	-	-	-	-	-	3.402

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force												Date: March 2024					
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10						P-1 Line Item Number / Title: MILSAT / MILSATCOM						Item Number / Title [DODIC]: AFWET					
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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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	-	-	-	-	-	11.962	-	-	20.969	-	-	3.402	-	-	-	-	-	3.402

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MILSAT / MILSATCOM	Item Number / Title [DODIC]: GBS
--	--	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.494	0.000	7.068	10.130	-	10.130
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.494	0.000	7.068	10.130	-	10.130
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.494	0.000	7.068	10.130	-	10.130

(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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - GBS Cost																		
Recurring Cost																		
GBS- Receive Suites, Integration and Installation	-	-	0.494	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GBS-TRANSEC modem	-	-	-	-	-	0.000	-	-	7.068	-	-	10.130	-	-	-	-	-	10.130
<i>Subtotal: Recurring Cost</i>	-	-	0.494	-	-	0.000	-	-	7.068	-	-	10.130	-	-	-	-	-	10.130
<i>Subtotal: Hardware - GBS Cost</i>	-	-	0.494	-	-	0.000	-	-	7.068	-	-	10.130	-	-	-	-	-	10.130
Gross/Weapon System Cost	-	-	0.494	-	-	0.000	-	-	7.068	-	-	10.130	-	-	-	-	-	10.130

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MILSAT / MILSATCOM	Item Number / Title [DODIC]: PTW Modems
--	--	---

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	17.371	16.635	7.063	-	7.063
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	17.371	16.635	7.063	-	7.063
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	17.371	16.635	7.063	-	7.063

(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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - A3M Cost																		
Recurring Cost																		
Modem Purchase (includes Labor & Shipping)	-	-	-	0.056	262	14.756	0.097	151	14.705	-	-	0.176	-	-	-	-	-	0.176
Spares	-	-	-	-	-	-	-	-	-	-	-	1.843	-	-	-	-	-	1.843
CGR FFRDC	-	-	-	-	-	-	-	-	-	-	-	0.007	-	-	-	-	-	0.007
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	14.756	-	-	14.705	-	-	2.026	-	-	-	-	-	2.026
<i>Subtotal: Hardware - A3M Cost</i>	-	-	-	-	-	14.756	-	-	14.705	-	-	2.026	-	-	-	-	-	2.026
Support - A3M Cost																		
Systems Engineering & Integration (SE&I)	-	-	-	-	-	-	-	-	0.775	-	-	1.585	-	-	-	-	-	1.585
Technical Mission Analysis	-	-	-	-	-	-	-	-	0.225	-	-	-	-	-	-	-	-	-
A&AS	-	-	-	-	-	-	-	-	0.830	-	-	0.852	-	-	-	-	-	0.852
Interim Contractor Support (ICS)	-	-	-	-	-	2.465	-	-	-	-	-	2.500	-	-	-	-	-	2.500
Other Support	-	-	-	-	-	0.150	-	-	0.100	-	-	0.100	-	-	-	-	-	0.100
<i>Subtotal: Support - A3M Cost</i>	-	-	-	-	-	2.615	-	-	1.930	-	-	5.037	-	-	-	-	-	5.037
Gross/Weapon System Cost	-	-	-	-	-	17.371	-	-	16.635	-	-	7.063	-	-	-	-	-	7.063

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force						Date: March 2024		
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10			P-1 Line Item Number / Title: MILSAT / MILSATCOM			Item Number / Title [DODIC]: SDN GEPs		
ID Code (A=Service Ready, B=Not Service Ready) : A				MDAP/MAIS Code:				
Resource Summary			Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (<i>Units in Each</i>)			-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)			-	-	-	17.089	-	17.089
Less PY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)			-	-	-	17.089	-	17.089
Plus CY Advance Procurement (<i>\$ in Millions</i>)			-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)			-	-	-	17.089	-	17.089
<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>)			-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - SDN GEPs Cost																		
Recurring Cost																		
Terminals	-	-	-	-	-	-	-	-	-	1.746	3	5.239	-	-	-	1.746	3	5.239
Civils	-	-	-	-	-	-	-	-	-	-	-	8.140	-	-	-	-	-	8.140
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	13.379	-	-	-	-	-	13.379
<i>Subtotal: Hardware - SDN GEPs Cost</i>	-	-	-	-	-	-	-	-	-	-	-	13.379	-	-	-	-	-	13.379
Support - SDN GEPs Cost																		
A&AS	-	-	-	-	-	-	-	-	-	-	-	3.710	-	-	-	-	-	3.710
<i>Subtotal: Support - SDN GEPs Cost</i>	-	-	-	-	-	-	-	-	-	-	-	3.710	-	-	-	-	-	3.710
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	-	-	17.089	-	-	-	-	-	17.089

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
MSSBIR / SBIR High (Space)

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** 0604441F **Other Related Program Elements:** 1206441F

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	300.437	148.666	39.438	0.000	-	0.000	0.000	0.000	0.000	0.000	-	488.541
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	300.437	148.666	39.438	0.000	-	0.000	0.000	0.000	0.000	0.000	-	488.541
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	300.437	148.666	39.438	0.000	-	0.000	0.000	0.000	0.000	0.000	-	488.541

(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: 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's (SBIRS) primary mission is to provide initial warning of a ballistic missile attack on the United States (US), its deployed forces and its allies. SBIRS enhances detection and improves reporting of intercontinental ballistic missiles, submarine launched ballistic missiles, and tactical ballistic missiles. SBIRS provides increased detection and tracking performance in order to meet requirements in the Operational Requirements Document (ORD). SBIRS will consist of satellites in Geosynchronous Earth Orbit (GEO) and in Highly Elliptical Earth Orbit (HEO) with an integrated, centralized ground station serving all SBIRS space elements, Defense Support Program (DSP) satellites and other program related support activities. The HEO payloads operate on a classified host.

SBIRS GEO-5 and 6 satellites are derivatives of the GEO-3 and 4 satellites and are replacements for GEO-1 and 2. A four phased contract approach awarded non-recurring engineering and parts obsolescence using advanced procurement funds in Sep 2012, followed by award of long lead items in Feb 2013, full production in Jun 2014, and technical refresh in Jun 2015. The GEO-5 and 6 technical refresh contract modification modernizes the existing spacecraft bus design to improve commonality across United States Space Force (USSF) and Government satellite programs, and enable compatibility with multiple launch vehicles. The full production effort includes 2 satellites with persistent infrared missile and threat warning payloads, launch vehicle integration, launch and early orbit test, dual communication band modification (unified SBand), and contractor operations support through operational acceptance. The GEO-5 satellite launched on 18 May 2021. The GEO-6 Satellite successfully launched 4 Aug 2022 and was operationally accepted March 2023.

For the GEO 5-6 block buy, the FY 2013 National Defense Authorization Act (NDAA) authorizes six years of incremental production funding and limits the incrementally funded contract obligation to 3,900M. The years of incremental funding are FY 2013-2018. Advance procurement was appropriated in FY 2011 and FY 2012. GEO 5-6 advance procurement and incremental funding are attributed to FY 2013 for the purposes of identifying full funding for procurement end items. Each year of appropriation FY 2013-2018 is in two parts, the incrementally funded contract amount and annual program support costs. The incrementally funded amount complies with the National Defense Authorization Act (NDAA) cap.

Space Based Infrared System (SBIRS) High Elliptical Earth Orbit (HEO)-3 and 4 payloads are replenishments for HEO-1 and 2 payloads, which were delivered on the SBIRS Engineering Manufacturing and Development (EMD) contract Research, Development, Test, and Evaluation (RDT&E) funded. The HEO-3 and 4 payloads are on-orbit and certified for Integrated Tactical Warning/Attack Assessment (ITW/AA) missile warning operations and certified for technical intelligence operations. HEO-1 and HEO-2 are in a storage/residual operational mode.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: MSSBIR / SBIR High (Space)
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 0604441F	Other Related Program Elements: 1206441F
Line Item MDAP/MAIS Code: N/A		
<p>Total GEO 3-4 3020/3021 funds are 2,794.947M. Total GEO 5-6 3020/3021/3022 funds are 3,369.2M. Total HEO 3-4 3020/3021 funds are 1,146.672M. Total S2E2 3080/3020/3021/3022 funds are 686.944M.</p> <p>SBIRS SURVIVABLE ENDURABLE EVOLUTION (S2E2): The S2E2 effort replaces the DSP only Mobile Ground System (MGS); S2E2 consists of the SBIRS Mobile Ground Terminal (SMGT) and Parabolic Dish Subsystem (PDSS) and is the critical situation monitoring element in the three national-level architectures: Integrated (ITW/AA) System, Chairman Joint Chiefs of Staff (CJCS) Critical Nodes, and Nuclear Command and Control System (NCCS). U.S. Strategic Command (USSTRATCOM) needs U.S. Space Command's global S/E TW/AA operational capabilities to meet President of the United States, Joint Staff, Combatant Commander, and Forward User requirements for continuous, persistent, and enduring TW/AA non-imaging infrared for Missile Warning (MW) and Nuclear Detection (NUDET) reporting across all phases of military operations. The program will deliver a minimum of 4 SMGTs that will have the modified capability in accordance with the U.S. Space Command (USSPACECOM) Survivable/Endurable Concept of Operations Concept of Operations (CONOPS), signed 19 November 2021, to include SBIRS Geosynchronous Earth Orbit (GEO) 5/6 processing and Tracking, Telemetry, and Command (TT&C), and the new protected and wide band Satellite Communication (SATCOM) capable terminals. Funding also provides Interim Contractor Support (ICS). The delivery of this effort enables the weapon system to process SBIRS GEO (1-6), and Global Positioning System (GPS) and NUDET data and missions while addressing long-standing obsolescence, supportability, and cyber-security concerns as well as improved capability to withstand a high-altitude electromagnetic pulse (HEMP) per MIL-STD-188-125-2. In addition, training software, and integration of the Universal Ground NUDET Terminal (UGNT) and the new protected and wide band SATCOM capable terminals are included. Finally, this effort includes all activities required to pivot the weapon system to meet the CONOPS change directed by USSPACECOM and signed on 19 November 2021. Additionally, S2E2 includes operations location setup, transportation of hardware to include, but not limited to, Systems Engineering and Technical Assistance (SETA) enterprise activities which provide intra-and inter-program office support to support S2E2 operations.</p> <p>SBIRS MOBILE AND FIXED SITE COMMUNICATIONS/ELECTRONIC REPLACEMENT: This effort procures Defense Support Program (DSP) and SBIRS assets to maintain the ground system equipment. Fixed site examples include, but are not limited to, legacy receiver, antenna drive system, Spacecraft Simulator RF, Mission Control Station (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 unsupportable data processing subsystem components. Funding also provides for Program Office and related support activities to include but not limited to, Systems Engineering and Technical Assistance (SETA) enterprise activities which provides intra- and inter-program office support. Funding for this effort is program element 1203915F and 1203915SF.</p> <p>Funding for this exhibit contained in PE 1203915SF</p>		
Justification: No FY 2025 funding.		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: MSSPAC / Special Space Activities
---	---

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	387.341	840.913	658.007	-	658.007	483.310	736.833	690.986	704.991	-	4,502.381
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	387.341	840.913	658.007	-	658.007	483.310	736.833	690.986	704.991	-	4,502.381
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	387.341	840.913	658.007	-	658.007	483.310	736.833	690.986	704.991	-	4,502.381

(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 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.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System
---	---

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 1203109SF
--	---	--

Line Item MDAP/MAIS Code: 345

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
<i>Procurement Quantity (Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gross/Weapon System Cost (\$ in Millions)</i>	45.371	46.833	101.147	51.601	-	51.601	49.962	51.209	52.290	53.343	-	451.756
<i>Less PY Advance Procurement (\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Net Procurement (P-1) (\$ in Millions)</i>	45.371	46.833	101.147	51.601	-	51.601	49.962	51.209	52.290	53.343	-	451.756
<i>Plus CY Advance Procurement (\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	45.371	46.833	101.147	51.601	-	51.601	49.962	51.209	52.290	53.343	-	451.756

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

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

Description:

The Mobile User Objective System (MUOS) provides a worldwide, multi-service population of mobile and fixed-site terminal users with ultra-high frequency (UHF), narrowband, and beyond line-of-sight satellite communications (SATCOM). MUOS significantly increases performance and capacity in support of critical Combatant Command SATCOM priorities. MUOS is the replacement system for the UHF Follow-on (UFO) system, which is currently beyond its design life. MUOS consists of Space, Ground, and User Entry Segments. MUOS reached full operational capability October 2019.

The Space Segment consists of five geosynchronous satellites to support a four satellite constellation over the intended service life, and provides both a legacy UHF payload, which is backward compatible with UFO, and a Wideband Code Division Multiple Access (WCDMA) payload, which provides cellular-like capability. The User Entry Segment consists of the MUOS waveform that is ultimately integrated into MUOS-capable terminals.

The cost for MUOS Ground Segment upgrades varies depending on the complexity of software defects being addressed and unique configuration of hardware and software requirements being fielded at each of the six MUOS ground sites within each given year. The MUOS Ground Segment upgrades address cybersecurity and lifecycle management issues at each of the six MUOS ground sites.

The Ground Segment or System consists of four world-wide Radio Access Facilities (RAFTs) (Wahiawa, Hawaii; Northwest Chesapeake, Virginia; Niscemi, Italy; and Geraldton, Australia) and two Satellite Control Facilities (Port Hueneme, California, and Schriever Space Force Base (SFB), Colorado). Each RAF includes three 60 ft. antennas and over 50 equipment racks which house a total of 5,000 major hardware components and 250 software applications across the MUOS Program. The RAF in Hawaii includes a Network Management Facility (NMF). The RAFTs in Hawaii and Virginia each include a Switching Facility (SF). All four RAFTs and two Satellite Control Facilities are considered Ground Sites.

Beginning in FY 2017, the program's focus has been upgrading ground sites to address ongoing cybersecurity threats, hardware and software obsolescence, and operational deficiencies. The program awarded the ground sustainment and modernization contract in FY 2019, and the program will be awarding the ground sustainment follow-on contract in FY 2025.

Funding for this exhibit is contained in PE 1203109SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System
---	---

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 1203109SF
---	--	---

Line Item MDAP/MAIS Code: 345

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	1 / Mobile User Objective System (Other)		A		- / 45.371	- / 46.833	- / 101.147	- / 51.601	- / 0.000	- / 51.601
P-40	Total Gross/Weapon System Cost				- / 45.371	- / 46.833	- / 101.147	- / 51.601	- / -	- / 51.601

Exhibits Schedule					FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-3a	1 / Mobile User Objective System (Other)		A		- / 49.962	- / 51.209	- / 52.290	- / 53.343	- / -	- / 451.756
P-40	Total Gross/Weapon System Cost				- / 49.962	- / 51.209	- / 52.290	- / 53.343	- / -	- / 451.756

*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 FY 2025 funding will address obsolescence and cybersecurity vulnerabilities within the MUOS Ground Segment. Emerging cybersecurity threats, increasing cybersecurity requirements, and the evolution of denial-of-service threats against DoD systems have made it imperative for the MUOS ground system to keep pace.

Funding will be used to procure Ground System updates for each of the six ground sites in each fiscal year through the Future Year Defense Program (FYDP) to correct hardware and software deficiencies. The ground system updates address hardware/software defect resolution and hardware degradation. The hardware/software updates are installed at each ground site as part of the MUOS operational end item requirements; ground system defect resolution includes associated engineering, integration, test, and delivery efforts to address cybersecurity vulnerabilities, and corrects issues to ensure readiness levels support the warfighter's narrowband SATCOM requirements. These Ground System updates will address hardware degradation; obsolete items to be replaced include Ka-band antenna components, Redhat/ Linux Operating System (OS)-based components, and GPS-based Timing and Frequency Distribution System.

FY 2025 funding will allow the program to rapidly respond to implement system resiliency and situational awareness necessary to operate through the contested space domain. Activities may include, but are not limited to, program office support, studies, technical analysis, experimentation, prototyping, etc.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System	Modification Number / Title: 1 / Mobile User Objective System

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	45.371	46.833	101.147	51.601	0.000	51.601	49.962	51.209	52.290	53.343	-	451.756
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	45.371	46.833	101.147	51.601	0.000	51.601	49.962	51.209	52.290	53.343	-	451.756
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	45.371	46.833	101.147	51.601	0.000	51.601	49.962	51.209	52.290	53.343	-	451.756

(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:

MUOS Ground System Updates will correct functional and cyber defects and address hardware and software obsolescence. Configuration updates are deployed as modification kits which are variable in scope and require significant non-recurring engineering and integration testing to ensure hardware and software system updates do not adversely impact ongoing operations. A specific modification kit's scope depends primarily on the magnitude and severity of the functional defects, cybersecurity defects and vulnerabilities, and obsolescence.

Funding is for five Ground System updates for each of the four Radio Access Facilities and three Ground System updates for each of the two Satellite Control Facilities in each fiscal year through the FYDP. The Ground System updates address hardware and software defect resolution as well as hardware degradation. The hardware/software updates are installed at each ground site as part of the MUOS operational end item requirements; ground system defect resolution includes associated engineering, integration, test, and delivery efforts to address cybersecurity vulnerabilities, and corrects issues to ensure readiness levels support the warfighter narrowband SATCOM requirements. To address hardware degradation, obsolete items will be replaced in phases in each fiscal year and can include GPS-based Timing and Frequency Distribution System, data back-up and recovery, and Earth Terminal Antenna components. Obsolete software components include Microsoft OS-based workstations and servers, Solaris OS based components, and Redhat/Linux OS-based components. Addressing software obsolescence may also include hardware replacement to support the new OS. Modification kit costs vary between the ground site locations and depend on the size and complexity of the infrastructure footprint of each modification kit's ground site destination. For example, because the Wahiawa ground site contains approximately 45-50% of the total ground segment's hardware and software infrastructure, this site's mod kits require a similar percentage of the overall budget for mod kits. Similarly, Northwest contains approximately 20% of the ground segment's hardware and software infrastructure, Niscemi and Geraldton each contain approximately 15% of the infrastructure, and the 10th Space Operations Squadron (SOPS) locations contain approximately 2% of the infrastructure.

Additionally, funding will be used for integration and testing of the necessary hardware and software upgrade options which address system deficiencies.

Milestone/Development Status

Development is on-track to meet system update targets and timelines.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force										Date: March 2024			
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10					P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System					Modification Number / Title: 1 / Mobile User Objective System			
ID Code (A=Service Ready, B=Not Service Ready) : A							MDAP/MAIS Code:						
Models of Systems Affected: None				Modification Type: Other				Related RDT&E PEs: 1203109SF					
Financial Plan	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	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 6: 10 SOPS OL-D (Schriever SFB)													
A Kits													
Recurring													
10 SOPS OL-D (Schriever SFB):INSTALL KITS Group A (Active)	5 / 0.829	3 / 0.857	3 / 1.898	3 / 0.947	- / -	3 / 0.947	3 / 0.914	3 / 0.937	3 / 0.957	3 / 0.976	- / -	26 / 8.315	
<i>Subtotal: Recurring</i>	- / 0.829	- / 0.857	- / 1.898	- / 0.947	- / -	- / 0.947	- / 0.914	- / 0.937	- / 0.957	- / 0.976	- / -	- / 8.315	
<i>Subtotal: 10 SOPS OL-D (Schriever SFB)</i>	- / 0.829	- / 0.857	- / 1.898	- / 0.947	- / -	- / 0.947	- / 0.914	- / 0.937	- / 0.957	- / 0.976	- / -	- / 8.315	
Modification Item 2 of 6: Geraldton Ground Site													
A Kits													
Recurring													
Geraldton Ground Site:INSTALL KITS Group A (Active)	5 / 6.287	5 / 6.494	5 / 14.385	5 / 7.175	- / -	5 / 7.175	5 / 6.929	5 / 7.104	5 / 7.254	5 / 7.400	- / -	40 / 63.028	
<i>Subtotal: Recurring</i>	- / 6.287	- / 6.494	- / 14.385	- / 7.175	- / -	- / 7.175	- / 6.929	- / 7.104	- / 7.254	- / 7.400	- / -	- / 63.028	
<i>Subtotal: Geraldton Ground Site</i>	- / 6.287	- / 6.494	- / 14.385	- / 7.175	- / -	- / 7.175	- / 6.929	- / 7.104	- / 7.254	- / 7.400	- / -	- / 63.028	
Modification Item 3 of 6: HQ (Port Hueneme) 10 SOPS													
A Kits													
Recurring													
HQ (Port Hueneme) 10 SOPS:INSTALL KITS Group A (Active)	5 / 0.932	3 / 0.963	3 / 2.133	3 / 1.064	- / -	3 / 1.064	3 / 1.027	3 / 1.053	3 / 1.076	3 / 1.097	- / -	26 / 9.345	
<i>Subtotal: Recurring</i>	- / 0.932	- / 0.963	- / 2.133	- / 1.064	- / -	- / 1.064	- / 1.027	- / 1.053	- / 1.076	- / 1.097	- / -	- / 9.345	
<i>Subtotal: HQ (Port Hueneme) 10 SOPS</i>	- / 0.932	- / 0.963	- / 2.133	- / 1.064	- / -	- / 1.064	- / 1.027	- / 1.053	- / 1.076	- / 1.097	- / -	- / 9.345	
Modification Item 4 of 6: Niscemi Ground Site													
A Kits													
Recurring													
Niscemi Ground Site:INSTALL KITS Group A (Active)	5 / 6.337	5 / 6.545	5 / 14.499	5 / 7.232	- / -	5 / 7.232	5 / 6.984	5 / 7.160	5 / 7.311	5 / 7.458	- / -	40 / 63.526	
<i>Subtotal: Recurring</i>	- / 6.337	- / 6.545	- / 14.499	- / 7.232	- / -	- / 7.232	- / 6.984	- / 7.160	- / 7.311	- / 7.458	- / -	- / 63.526	
<i>Subtotal: Niscemi Ground Site</i>	- / 6.337	- / 6.545	- / 14.499	- / 7.232	- / -	- / 7.232	- / 6.984	- / 7.160	- / 7.311	- / 7.458	- / -	- / 63.526	
Modification Item 5 of 6: Northwest (VA) Ground Site													
A Kits													
Recurring													

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force										Date: March 2024			
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10					P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System					Modification Number / Title: 1 / Mobile User Objective System			
ID Code (A=Service Ready, B=Not Service Ready) : A							MDAP/MAIS Code:						
Models of Systems Affected: None				Modification Type: Other				Related RDT&E PEs: 1203109SF					
Financial Plan	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	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)				
Northwest (VA) Ground Site:INSTALL KITS Group A (Active)	5 / 8.638	5 / 8.922	5 / 19.764	5 / 9.858	- / -	5 / 9.858	5 / 9.520	5 / 9.760	5 / 9.966	5 / 10.166	- / -	40 / 86.594	
<i>Subtotal: Recurring</i>	- / 8.638	- / 8.922	- / 19.764	- / 9.858	- / -	- / 9.858	- / 9.520	- / 9.760	- / 9.966	- / 10.166	- / -	- / 86.594	
<i>Subtotal: Northwest (VA) Ground Site</i>	- / 8.638	- / 8.922	- / 19.764	- / 9.858	- / -	- / 9.858	- / 9.520	- / 9.760	- / 9.966	- / 10.166	- / -	- / 86.594	
Modification Item 6 of 6: Wahiawa Ground Site													
A Kits													
Recurring													
Wahiawa Ground Site:INSTALL KITS Group A (Active)	5 / 20.194	5 / 20.855	5 / 46.198	5 / 23.042	- / -	5 / 23.042	5 / 22.257	5 / 22.816	5 / 23.295	5 / 23.765	- / -	40 / 202.422	
<i>Subtotal: Recurring</i>	- / 20.194	- / 20.855	- / 46.198	- / 23.042	- / -	- / 23.042	- / 22.257	- / 22.816	- / 23.295	- / 23.765	- / -	- / 202.422	
<i>Subtotal: Wahiawa Ground Site</i>	- / 20.194	- / 20.855	- / 46.198	- / 23.042	- / -	- / 23.042	- / 22.257	- / 22.816	- / 23.295	- / 23.765	- / -	- / 202.422	
<i>Subtotal: Procurement, All Modification Items</i>	- / 43.217	- / 44.636	- / 98.877	- / 49.318	- / -	- / 49.318	- / 47.631	- / 48.830	- / 49.859	- / 50.862	- / -	- / 433.230	
Installation													
Modification Item 1 of 6: 10 SOPS OL-D (Schriever SFB)	5 / 0.234	3 / 0.239	3 / 0.244	3 / 0.251	- / -	3 / 0.251	3 / 0.256	3 / 0.261	3 / 0.267	3 / 0.272	- / -	26 / 2.024	
Modification Item 2 of 6: Geraldton Ground Site	5 / 0.449	5 / 0.458	5 / 0.448	5 / 0.443	- / -	5 / 0.443	5 / 0.453	5 / 0.462	5 / 0.472	5 / 0.482	- / -	40 / 3.667	
Modification Item 3 of 6: HQ (Port Hueneme) 10 SOPS	5 / 0.232	3 / 0.236	3 / 0.247	3 / 0.254	- / -	3 / 0.254	3 / 0.260	3 / 0.265	3 / 0.271	3 / 0.276	- / -	26 / 2.041	
Modification Item 4 of 6: Niscemi Ground Site	5 / 0.423	5 / 0.431	5 / 0.423	5 / 0.418	- / -	5 / 0.418	5 / 0.427	5 / 0.436	5 / 0.445	5 / 0.455	- / -	40 / 3.458	
Modification Item 5 of 6: Northwest (VA) Ground Site	5 / 0.285	5 / 0.291	5 / 0.303	5 / 0.312	- / -	5 / 0.312	5 / 0.318	5 / 0.325	5 / 0.332	5 / 0.339	- / -	40 / 2.505	
Modification Item 6 of 6: Wahiawa Ground Site	5 / 0.531	5 / 0.542	5 / 0.605	5 / 0.605	- / -	5 / 0.605	5 / 0.617	5 / 0.630	5 / 0.644	5 / 0.657	- / -	40 / 4.831	
<i>Subtotal: Installation</i>	30 / 2.154	26 / 2.197	26 / 2.270	26 / 2.283	- / -	26 / 2.283	26 / 2.331	26 / 2.379	26 / 2.431	26 / 2.481	- / -	212 / 18.526	
Total													
Total Cost (Procurement + Support + Installation)	45.371	46.833	101.147	51.601	0.000	51.601	49.962	51.209	52.290	53.343	-	451.756	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System	Modification Number / Title: 1 / Mobile User Objective System
--	---	---

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

Modification Item 1 of 6: 10 SOPS OL-D (Schriever SFB)

Manufacturer Information

Manufacturer Name: General Dynamics	Manufacturer Location: Scottsdale, AZ
-------------------------------------	---------------------------------------

Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 2
--	------------------------------------

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	5 / 0.234	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.234
FY 2023	- / -	3 / 0.239	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.239
FY 2024	- / -	- / -	3 / 0.244	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.244
FY 2025	- / -	- / -	- / -	3 / 0.251	- / -	3 / 0.251	- / -	- / -	- / -	- / -	- / -	3 / 0.251
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.256	- / -	- / -	- / -	- / -	3 / 0.256
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.261	- / -	- / -	- / -	3 / 0.261
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.267	- / -	- / -	3 / 0.267
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.272	- / -	3 / 0.272
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.234	3 / 0.239	3 / 0.244	3 / 0.251	- / -	3 / 0.251	3 / 0.256	3 / 0.261	3 / 0.267	3 / 0.272	- / -	26 / 2.024

Installation Schedule

	PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
		Q1	Q2	Q3	Q4																										
In	5	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	0	26
Out	5	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	0	26

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System	Modification Number / Title: 1 / Mobile User Objective System
--	---	---

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

Modification Item 2 of 6: Geraldton Ground Site

Manufacturer Information

Manufacturer Name: General Dynamics	Manufacturer Location: Scottsdale, AZ
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 2

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	5 / 0.449	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.449
FY 2023	- / -	5 / 0.458	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.458
FY 2024	- / -	- / -	5 / 0.448	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.448
FY 2025	- / -	- / -	- / -	5 / 0.443	- / -	5 / 0.443	- / -	- / -	- / -	- / -	- / -	5 / 0.443
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.453	- / -	- / -	- / -	- / -	5 / 0.453
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.462	- / -	- / -	- / -	5 / 0.462
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.472	- / -	- / -	5 / 0.472
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.482	- / -	5 / 0.482
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.449	5 / 0.458	5 / 0.448	5 / 0.443	- / -	5 / 0.443	5 / 0.453	5 / 0.462	5 / 0.472	5 / 0.482	- / -	40 / 3.667

Installation Schedule

	PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
		Q1	Q2	Q3	Q4																										
In	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40
Out	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System	Modification Number / Title: 1 / Mobile User Objective System
--	---	---

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

Modification Item 3 of 6: HQ (Port Hueneme) 10 SOPS

Manufacturer Information

Manufacturer Name: General Dynamics	Manufacturer Location: Scottsdale, AZ
-------------------------------------	---------------------------------------

Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 2
--	------------------------------------

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	5 / 0.232	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.232
FY 2023	- / -	3 / 0.236	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.236
FY 2024	- / -	- / -	3 / 0.247	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.247
FY 2025	- / -	- / -	- / -	3 / 0.254	- / -	3 / 0.254	- / -	- / -	- / -	- / -	- / -	3 / 0.254
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.260	- / -	- / -	- / -	- / -	3 / 0.260
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.265	- / -	- / -	- / -	3 / 0.265
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.271	- / -	- / -	3 / 0.271
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.276	- / -	3 / 0.276
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.232	3 / 0.236	3 / 0.247	3 / 0.254	- / -	3 / 0.254	3 / 0.260	3 / 0.265	3 / 0.271	3 / 0.276	- / -	26 / 2.041

Installation Schedule

	PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
		Q1	Q2	Q3	Q4																										
In	5	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	0	26
Out	5	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	1	1	1	0	26

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System	Modification Number / Title: 1 / Mobile User Objective System
--	---	---

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

Modification Item 4 of 6: Niscemi Ground Site

Manufacturer Information

Manufacturer Name: General Dynamics	Manufacturer Location: Scottsdale, AZ
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 2

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	5 / 0.423	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.423
FY 2023	- / -	5 / 0.431	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.431
FY 2024	- / -	- / -	5 / 0.423	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.423
FY 2025	- / -	- / -	- / -	5 / 0.418	- / -	5 / 0.418	- / -	- / -	- / -	- / -	- / -	5 / 0.418
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.427	- / -	- / -	- / -	- / -	5 / 0.427
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.436	- / -	- / -	- / -	5 / 0.436
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.445	- / -	- / -	5 / 0.445
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.455	- / -	5 / 0.455
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.423	5 / 0.431	5 / 0.423	5 / 0.418	- / -	5 / 0.418	5 / 0.427	5 / 0.436	5 / 0.445	5 / 0.455	- / -	40 / 3.458

Installation Schedule

	PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
		Q1	Q2	Q3	Q4																										
In	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40
Out	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System	Modification Number / Title: 1 / Mobile User Objective System
--	---	---

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

Modification Item 5 of 6: Northwest (VA) Ground Site

Manufacturer Information

Manufacturer Name: General Dynamics Manufacturer Location: Scottsdale, AZ

Administrative Leadtime (in Months): 1 Production Leadtime (in Months): 2

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	5 / 0.285	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.285
FY 2023	- / -	5 / 0.291	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.291
FY 2024	- / -	- / -	5 / 0.303	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.303
FY 2025	- / -	- / -	- / -	5 / 0.312	- / -	5 / 0.312	- / -	- / -	- / -	- / -	- / -	5 / 0.312
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.318	- / -	- / -	- / -	- / -	5 / 0.318
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.325	- / -	- / -	- / -	5 / 0.325
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.332	- / -	- / -	5 / 0.332
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.339	- / -	5 / 0.339
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.285	5 / 0.291	5 / 0.303	5 / 0.312	- / -	5 / 0.312	5 / 0.318	5 / 0.325	5 / 0.332	5 / 0.339	- / -	40 / 2.505

Installation Schedule

	PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
		Q1	Q2	Q3	Q4																										
In	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40
Out	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: MUOS00 / Mobile User Objective System	Modification Number / Title: 1 / Mobile User Objective System
--	---	---

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

Modification Item 6 of 6: Wahiawa Ground Site

Manufacturer Information

Manufacturer Name: General Dynamics	Manufacturer Location: Scottsdale, AZ
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 2

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Installation Information

Method of Implementation: Contract Field Team

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	5 / 0.531	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.531
FY 2023	- / -	5 / 0.542	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.542
FY 2024	- / -	- / -	5 / 0.605	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.605
FY 2025	- / -	- / -	- / -	5 / 0.605	- / -	5 / 0.605	- / -	- / -	- / -	- / -	- / -	5 / 0.605
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.617	- / -	- / -	- / -	- / -	5 / 0.617
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.630	- / -	- / -	- / -	5 / 0.630
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.644	- / -	- / -	5 / 0.644
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.657	- / -	5 / 0.657
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 0.531	5 / 0.542	5 / 0.605	5 / 0.605	- / -	5 / 0.605	5 / 0.617	5 / 0.630	5 / 0.644	5 / 0.657	- / -	40 / 4.831

Installation Schedule

	PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
		Q1	Q2	Q3	Q4																										
In	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40
Out	5	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	-	2	2	1	0	40

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: NSSL00 / National Security Space Launch
--	---

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: 176

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	8	3	10	7	-	7	6	8	9	8	9	68
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,258.561	1,024.803	2,142.846	1,847.486	-	1,847.486	1,747.301	2,150.870	2,282.176	2,160.994	2,388.330	18,003.367
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,258.561	1,024.803	2,142.846	1,847.486	-	1,847.486	1,747.301	2,150.870	2,282.176	2,160.994	2,388.330	18,003.367
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,258.561	1,024.803	2,142.846	1,847.486	-	1,847.486	1,747.301	2,150.870	2,282.176	2,160.994	2,388.330	18,003.367

(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>)	282.320	341.601	214.285	263.927	-	263.927	291.217	268.859	253.575	270.124	265.370	264.755

Description:

The National Security Space Launch (NSSL) program is a Major Defense Acquisition Program (MDAP) Acquisition Category (ACAT) 1C program that acquires launch services to provide critical space support to satisfy Department of Defense (DoD) warfighter, national security, and other United States Government (USG) space lift missions. The NSSL program will leverage USG inter-agency and commercial cooperation by utilizing the total launch vehicle performance and maximizing on-orbit opportunities that will expedite delivery of critical capabilities. The NSSL program provides satellite delivery to specific orbits through certified Launch Vehicle (LV) providers.

NSSL procures launch services and is not a weapon system. The program provides launch capacity for the Government National Launch Forecast (NLF) requirements, but does not take ownership of any specific launch hardware. This program does not require and does not include advance procurement or initial spares. Flyaway Unit Cost is not applicable and Weapon System Unit Cost are not representative due to the mix of vehicles in the program. The requirements for NSSL launch services are derived from multiple spacecraft requirements. The Space Force procurement satisfies National Security Space (NSS) unique capabilities for NSS requirements that are beyond the scope of current commercial capability. "To Complete" projections include only known requirements at this time.

Beginning in FY 2025, the Space Force will procure launch services to deliver National Security Space (NSS) missions via the Phase 3 contracts. NSSL Phase 3 will utilize a dual-lane approach to meet warfighter launch requirements, add a third launch provider, provide maximum competitive opportunities to industry, expand mission assurance options, and to allow the Government to take advantage of emerging and innovative launch capabilities. The dual-lane procurement approach consists of Lane 1, where launch services for risk tolerant missions will be procured from diverse launch service providers with annual on-ramping; and Lane 2 where launch services for specified missions will be procured from fully certified systems for the nation's most critical payloads.

The Space Force, National Reconnaissance Office (NRO), and the National Aeronautics and Space Administration (NASA) have a coordinated strategy for certification of New Entrants to launch payloads in support of NSS and other USG requirements. The Space Force continues to actively work with potential New Entrants to reliably meet NSS requirements. The Government may award early integration contracts to ensure each potential offeror's launch system is compatible with the intended payload. The Space Force's intent is to compete as much as possible all launch service procurements where more than one certified provider can service the required orbit.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
NSSL00 / National Security Space Launch

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: 176

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	National Security Space Launch	P-5a, P-21	A		8 / 2,258.561	3 / 1,024.803	10 / 2,142.846	7 / 1,847.486	- / -	7 / 1,847.486
P-40	Total Gross/Weapon System Cost				8 / 2,258.561	3 / 1,024.803	10 / 2,142.846	7 / 1,847.486	- / -	7 / 1,847.486

*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:

FY 2025 NSSL procurement funding will acquire launch services to provide critical space support required to satisfy Department of Defense (DoD) warfighter, national security, and other US Government space lift missions while leveraging commercial innovation. Launch services include, but are not limited to, launch vehicle manufacturing, launch operations (tasks such as systems and factory engineering, program management, launch and range activities, and infrastructure), mission success incentives, recurring costs for Orbital Debris Mitigation Standard Practice, secondary payload adapters (i.e. multi-mission manifest adapters) and integration onto NSS or other USG agency procured launch services, launch propellants, independent mission assurance, evaluation and certification of potential New Entrants, early integration activities, studies and analysis, program office support and any other related activities to support mission requirements to rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain.

FY 2025 funding will continue to support Phase 2 Launch Service Support (LSS) which includes NSS readiness, fleet surveillance, fleet mission assurance, and unique NSS infrastructure requirements (Western Range, vertical integration, classified facilities, etc).

Beginning in FY 2025, the Space Force will procure launch services via the Phase 3 contracts. NSSL Phase 3 will utilize a dual-lane procurement approach that consists of Lane 1 and Lane 2.

The Lane 1 launch task orders will be fully burdened and will not include annual LSS. Lane 1 is targeted to serve more risk-tolerant space vehicles launching to commercially addressable orbits and will incorporate tiered mission assurance as required by each mission's risk tolerance posture.

Lane 2 will include LSS, consisting of non-discrete NSS requirement-driven costs such as fleet surveillance, support to Government mission assurance, NSS-unique infrastructure, and complex security and integration requirements. Lane 2 procurements will fund LSS annually to address NSS-unique items that are not provided by the commercial launch service sector.

The Space Force is responsible for funding its own missions. Space Development Agency (SDA) launch services are procured under a separate Program Element. Generally, non-Space Force launch services are funded within their respective entities (e.g. NRO, Navy).

The Space Vehicle (SV) Program offices and other partners are responsible for funding mission unique requirements including hardware, integration and testing. Funding for mission unique requirements that span across NSSL and the SV Program Office will be shared between both organizations.

Funding for this exhibit is contained in PE 1203953SF.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: NSSL00 / National Security Space Launch	Item Number / Title [DODIC]: National Security Space Launch
--	---	---

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	8	3	10	7	-	7
Gross/Weapon System Cost (\$ in Millions)	2,258.561	1,024.803	2,142.846	1,847.486	-	1,847.486
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,258.561	1,024.803	2,142.846	1,847.486	-	1,847.486
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,258.561	1,024.803	2,142.846	1,847.486	-	1,847.486
<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)	282.320	341.601	214.285	263.927	-	263.927

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

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
Launch - Launch End Item Cost																		
Recurring Cost																		
Launch Services ^(†)	151.028	8	1,208.226	173.768	3	521.304	163.256	10	1,632.558	165.406	7	1,157.845	-	-	-	165.406	7	1,157.845
Launch Services Support	-	-	634.925	-	-	296.410	-	-	291.888	-	-	476.558	-	-	-	-	-	476.558
Enterprise Systems Engineering & Integration	-	-	147.886	-	-	56.327	-	-	53.396	-	-	54.830	-	-	-	-	-	54.830
Mission Assurance	-	-	194.063	-	-	106.344	-	-	115.088	-	-	103.574	-	-	-	-	-	103.574
<i>Subtotal: Recurring Cost</i>	<i>-</i>	<i>-</i>	<i>2,185.100</i>	<i>-</i>	<i>-</i>	<i>980.385</i>	<i>-</i>	<i>-</i>	<i>2,092.930</i>	<i>-</i>	<i>-</i>	<i>1,792.807</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1,792.807</i>
<i>Subtotal: Launch - Launch End Item Cost</i>	<i>-</i>	<i>-</i>	<i>2,185.100</i>	<i>-</i>	<i>-</i>	<i>980.385</i>	<i>-</i>	<i>-</i>	<i>2,092.930</i>	<i>-</i>	<i>-</i>	<i>1,792.807</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1,792.807</i>
Support - Support End Item Cost																		
Other Support	-	-	2.564	-	-	2.381	-	-	2.929	-	-	3.018	-	-	-	-	-	3.018
A&AS	-	-	32.897	-	-	13.888	-	-	18.331	-	-	22.489	-	-	-	-	-	22.489
FFRDC	-	-	38.000	-	-	28.149	-	-	28.656	-	-	29.172	-	-	-	-	-	29.172
<i>Subtotal: Support - Support End Item Cost</i>	<i>-</i>	<i>-</i>	<i>73.461</i>	<i>-</i>	<i>-</i>	<i>44.418</i>	<i>-</i>	<i>-</i>	<i>49.916</i>	<i>-</i>	<i>-</i>	<i>54.679</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>54.679</i>
Gross/Weapon System Cost	282.320	8	2,258.561	341.601	3	1,024.803	214.285	10	2,142.846	263.927	7	1,847.486	-	-	-	263.927	7	1,847.486

Remarks:

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: NSSL00 / National Security Space Launch	Item Number / Title [DODIC]: National Security Space Launch
ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:	
<p>A Memorandum of Understanding (MOU) between the NRO and the Air Force, dated 7 October 2011, as updated per Addendum 2 of 13 January 2018, specifies a 60/40 Air Force/NRO share ratio for Federally Funded Research and Development Center (FFRDC) Mission Assurance. An updated Interagency Agreement (IA) between the Space and Missile Systems Center, Launch Enterprise, and the National Reconnaissance Office (NRO), dated 1 October 2019 provides a 75/25 cost share agreement for the Phase 2 Launch Service Support.</p> <p>The Space Force and the NRO will continue to share the costs for the Phase 3 Launch Service Support.</p> <p>FY23, FY24 and FY25 Launch Services and Launch Service Support amounts reflect Firm Fixed Price values based on Phase 2 average contract pricing estimate methodology.</p> <p>(t) indicates the presence of a P-5a</p>		

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: NSSL00 / National Security Space Launch	Item Number / Title [DODIC]: National Security Space Launch
--	---	---

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
Launch Services ^(†)		2021	SpaceX/ULA / CA/CO	Various	SSC, LA AFB, CA	Mar 2021	Apr 2024	3	171.364	Y		May 2019
Launch Services ^(†)		2022	SpaceX/ULA / CA/CO	Various	SSC, LA AFB, CA	May 2022	May 2024	5	151.904	Y		May 2019
Launch Services ^(†)		2023	SpaceX/ULA / CA/CO	Various	SSC, LA AFB, CA	Jul 2023	Jul 2025	3	173.768	Y		May 2019
Launch Services ^(†)		2024	SpaceX/ULA / CA/CO	Various	SSC, LA AFB, CA	Nov 2023	Nov 2025	10	163.256	Y		May 2019
Launch Services ^(†)		2025	TBD / TBD	TBD	SSC, LA AFB, CA	Jan 2025	Jan 2027	7	165.406	Y		Oct 2023

^(†) indicates the presence of a P-21

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: NSSL00 / National Security Space Launch	Item Number / Title [DODIC]: National Security Space Launch
--	---	---

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2025												Fiscal Year 2026												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025												Calendar Year 2026												
							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
Launch Services																															
1		2021	AF	3	3	0																							0		
1		2022	AF	5	2	3	-	-	-	-	-	1	2																0		
1		2023	AF	3	0	3	-	-	-	-	-	-	-	-	3														0		
1		2024	AF	10	0	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10								0		
2		2025	AF	7	0	7				A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7			
							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	

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** NSSL00 / National Security Space Launch **Item Number / Title [DODIC]:** National Security Space Launch

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2027												Fiscal Year 2028												BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2026	BAL DUE AS OF 1 OCT	Calendar Year 2027												Calendar Year 2028												
							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
Launch Services																															
	1	2021	AF	3	3	0																							0		
	1	2022	AF	5	5	0																							0		
	1	2023	AF	3	3	0																							0		
	1	2024	AF	10	10	0																							0		
	2	2025	AF	7	0	7	-	-	-	7																			0		
							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	

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: NSSL00 / National Security Space Launch	Item Number / Title [DODIC]: National Security Space Launch
--	---	---

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)								
		MSR For 2025	1-8-5 For 2025	MAX For 2025	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	SpaceX/ULA - CA/CO				0	0	0	0	0	0	0	0	0
2	TBD - TBD	10	10	10	0	4	24	28	0	0	0	0	0

"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).

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: NUDETS / NUDET Detection System
--	---

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203913SF	Other Related Program Elements: N/A
--	---	--

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	7.062	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	7.062
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	7.062	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	7.062
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	7.062	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	-	7.062

(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 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, dated 21 January 2004, documents the requirements for space-based NUDET detection. Space-based NUDET detection is also mandated by Public Law 110-181, dated 28 January 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, Treaty Monitoring, and a classified mission.

The USNDS 6 program is jointly sponsored and funded by the Department of Defense (DoD), through the Air Force, 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 USNDS space sensors as Government Furnished Equipment to the AF USNDS Program Office, which is responsible for all acquisition and systems engineering, integration and test 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 USNDS program in Program Element (PE) 1203913F with Research, Development, Test and Evaluation, Space Procurement AF, Procurement Space Force, and Operations and Maintenance dollars. USNDS payload integration onto GPS satellites is funded in the GPS Space Segment PE 1203265SF for GPS III SVs and PE 1203269SF for GPS IIIF SVs.

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 satellites, the Global Burst Detection payload for Medium Earth Orbit platforms (GPS satellites), and the Space Atmospheric Burst Reporting System payload for GEO platforms (classified GEO hosts). Together, these sensors and associated communications capabilities 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, the Integrated Correlation and Display System) and the deployable mobile ground segment (survivable Ground NDS Terminals), and survivable/endurable Universal Ground NDS Terminals, when fielded. The ground segment provides ground receiving analysis and reporting capabilities to national authorities, commands, and forward users as well as Department of State for the Treaty Monitoring and Verification mission.

The ground control segment is being modernized and continuously improved through an incremental evolutionary acquisition approach. Fact of life upgrades include operating system changes (Red Hat Linux) to meet information assurance requirements and hardware/software technology refreshes.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: NUDETS / NUDET Detection System
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 1203913SF	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
Funding for this exhibit is contained in PE 1203913SF, NUDET Detection System (SPACE).		

Justification:
No FY 2025 funding requested.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: PTES00 / PTES HUB
---	---

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	6	12	12	-	12	-	-	-	-	-	30
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	42.464	56.482	56.148	-	56.148	11.866	0.000	0.000	0.000	-	166.960
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	42.464	56.482	56.148	-	56.148	11.866	0.000	0.000	0.000	-	166.960
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	42.464	56.482	56.148	-	56.148	11.866	0.000	0.000	0.000	-	166.960

(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>)	-	7.077	4.707	4.679	-	4.679	-	-	-	-	-	5.565

Description:

The global threat of electronic warfare attacks against space systems will expand in the coming years in both number and types of weapons. Threat development will very likely focus on jamming capabilities against dedicated military satellite communications (MILSATCOM). To address this critical threat, the Space Force is developing the Protected Tactical Enterprise Service (PTES) ground system to provide worldwide, anti-jam, Low Probability of Intercept (LPI) communications for tactical warfighters. PTES will use the Protected Tactical Waveform (PTW) to provide anti-jam communications via military and commercial satellite systems for tactical users in all Services. Initially, PTES will utilize the Wideband Global SATCOM (WGS) system and then will expand to commercial satellites and the Protected Tactical SATCOM (PTS) system.

The PTES program is developing a Mission Management System (MMS), a Key Management System (KMS), and Joint Hubs (JHs) to enable PTW via transponded WGS satellites, with planned extension to commercial SATCOM. Production-representative PTW modems for user terminals were developed by the Protected Tactical Service Field Demonstration (PTSFD) and will be separately acquired by each Service and by international partners.

For the PTW Over WGS effort, the Space Force utilized the FY 2016 National Defense Authorization Act (NDAA), Section 804, Middle Tier of Acquisition (MTA) for Rapid Prototyping (RP) authority to deliver a PTES Operational Demonstration meeting Initial Operational Capability (IOC) threshold capabilities in FY 2023. On 31 May 2023, the PTES Program Office successfully transitioned the program from an MTA into the Execution Phase of the Software Acquisition Pathway. The PTES addresses an operational need in the Pacific region by achieving IOC in FY 2025 via WGS. IOC provides ground elements for PTW over WGS and consists of PTES installation at two WGS Gateway sites utilizing one WGS satellite. The Navy Wideband Anti-Jam Modem System (WAMS), the Air Force-Army Anti-Jam Modem (A3M), and other stakeholders rely on PTES to provide PTW ground infrastructure. At Full Operational Capability (FOC), PTES will provide worldwide PTW operations using up to all WGS satellites.

To meet the warfighter requirements for protected tactical MILSATCOM and identified capability gaps, Procurement funding will be used to acquire the JHs necessary to operate the system at FOC. PTES requires two JHs, at separate locations, to operate at IOC. Each JH requires site surveys, equipment purchases (modems, End Cryptographic Unit (ECU), etc.), equipment installation, and equipment testing.

For PTW Over Commercial effort, the PTES system will achieve IOC providing resilient commercial capacity and path diversity across ground elements for PTW over commercial architectures in FY 2026. PTES will reach FOC in FY 2028 providing robust PTW operations using commercial satellites in various orbits, to include GEO and Medium Earth Orbit (MEO).

Procurement funding will be used to acquire JHs. These JHs will enable integration of PTW Over Commercial with commercial SATCOM systems in Geosynchronous Orbit (GEO). Procurement funds will also be used for Interim Contractor Support (ICS), to include purchase of initial spares and support equipment, to enable seamless transition into operations and sustainment.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: PTES00 / PTES HUB
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		

This program has associated Research Development Test and Evaluation funding in PE 1206760SF.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
PTES00 / PTES HUB

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

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	PTES HUB				- / -	- / 42.462	- / 56.482	- / 56.148	- / -	- / 56.148
P-40	Total Gross/Weapon System Cost				- / -	6 / 42.464	12 / 56.482	12 / 56.148	- / -	12 / 56.148

*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:
In FY 2025, the PTES program will procure, assemble, test and install a total of twelve JHs at eight different DoD gateway sites that will expand PTW coverage over WGS as well as Commercial constellations. Each Joint Hub consists of three racks of hardware equipment that includes modems, ECUs and spares. These twelve JHs are procured with PTES procurement funds. Equipment installation, equipment testing, integration, and Other Government Costs are included in this effort. FY 2025 funding will allow the program to rapidly respond to implement system resiliency and situational awareness necessary to operate through the contested space domain. Activities may include, but are not limited to, program office support, studies, technical analysis, etc. For FY 2023 and FY 2024, SE&I was rolled up under PTES Ground. During the FY 2025 PB cycle, SE&I was separated out for greater cost transparency.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: PTES00 / PTES HUB	Aggregated Items Title: PTES HUB
--	---	--

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
PTES HUB																				
PTES Ground	A		-	-	-	7.077	6	42.462	4.707	12	56.482	3.680	12	44.154	-	-	-	3.680	12	44.154
Enterprise SE&I	A		-	-	-	-	-	-	-	-	-	-	-	8.755	-	-	-	-	-	8.755
CGR FFRDC	A		-	-	-	-	-	-	-	-	-	-	-	0.056	-	-	-	-	-	0.056
Subtotal: PTES HUB			-	-	-	-	-	42.462	-	-	56.482	-	-	52.965	-	-	-	-	-	52.965
Management Services																				
A&AS	A		-	-	-	-	-	-	-	-	-	-	-	3.183	-	-	-	-	-	3.183
Subtotal: Management Services			-	-	-	-	-	-	-	-	-	-	-	3.183	-	-	-	-	-	3.183
Total			-	-	-	-	-	42.462	-	-	56.482	-	-	56.148	-	-	-	-	-	56.148

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

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: RSLP00 / Rocket Systems Launch Program
--	--

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 1206860SF
--	---	--

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	39.145	74.848	0.000	-	0.000	0.000	0.000	0.000	0.000	-	113.993
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	39.145	74.848	0.000	-	0.000	0.000	0.000	0.000	0.000	-	113.993
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	39.145	74.848	0.000	-	0.000	0.000	0.000	0.000	0.000	-	113.993

(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 Rocket Systems Launch Program (RSLP) procures small launch services to deliver affordable, flexible spacelift for small payloads. The small launch program complements the National Security Space Launch (NSSL) program with multiple options to acquire dedicated spacelift and rideshare services for developmental, responsive, demonstration, and small operational space vehicles. The Spacelift Capability Production Document approved 31 May 2016 supports the requirement for small spacelift capability.

No FY 2025 funds are requested. RSLP continues to fly previously procured Space Force-funded missions and supports new and existing missions for other DoD agencies funded by each mission partner.

This program does not require and does not include advance procurement or initial spares. Flyaway Unit Cost is not applicable and Weapon System Unit Cost are not representative due to the mix of vehicles in the program. RSLP procures launch services and is not a weapon system. The program provides launch capacity for the Government National Launch Forecast requirements, but does not take ownership of any specific launch vehicle. The requirements for small launch services are derived from multiple spacecraft requirements.

Funding for this exhibit is contained in PE 1206860SF.

Justification:

No FY 2025 funds are requested.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: SDALCH / Space Development Agency Launch
---	--

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	7	5	4	-	4	5	12	8	4	-	45
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	854.288	529.468	357.178	-	357.178	457.943	1,235.117	827.558	396.242	-	4,657.794
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	-	854.288	529.468	357.178	-	357.178	457.943	1,235.117	827.558	396.242	-	4,657.794
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	-	854.288	529.468	357.178	-	357.178	457.943	1,235.117	827.558	396.242	-	4,657.794

(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>	-	122.041	105.894	89.295	-	89.295	91.589	102.926	103.445	99.061	-	103.507

Description:

The Space Development Agency (SDA), established in 2019, has a mission that begins and ends with the war-fighter. SDA orchestrates the development, fielding, and operation of the Department of Defense's (DoD's) future threat-driven Proliferated Warfighter Space Architecture (PWSA) and uses novel approaches to accelerate the delivery of military space capabilities necessary to ensure U.S. technological and military advantage in space for national defense. SDA will deliver capabilities to joint war-fighting forces in two-year tranches. SDA began to procure launch services for Tranche 1 satellites in Fiscal Year (FY) 2022 for data transport and resilient missile warning/ missile tracking (MW/MT) capability and will procure launch services in FY 2023 - FY 2029 for Tranche 1, Tranche 2, and future Tranche capabilities.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
SDALCH / Space Development Agency Launch

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

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	Space Development Agency Launch		A		- / -	7 / 854.288	5 / 529.468	4 / 357.178	- / -	4 / 357.178
P-40	Total Gross/Weapon System Cost				- / -	7 / 854.288	5 / 529.468	4 / 357.178	- / -	4 / 357.178

*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:
 FY 2023 funding procured launch services for eight launches under the United States Space Force (USSF) National Security Space Launch (NSSL) program for delivery of Tranche 1 Space Vehicles (SVs). An additional launch mission was funded through an OMNIBUS reprogramming action. The Resource Summary table did not get updated to reflect the additional launch; the correct FY 2023 quantity is 8.

FY 2024 funding procures launch services for five launches under the USSF NSSL program for delivery of Tranche 1 and Tranche 2 SVs.

FY 2025 funding will procure launch services for four launches under the USSF NSSL program for delivery of Tranche 2 SVs.

The Space Development Agency (SDA) aims to provide responsive and resilient space capabilities in support of the Joint Force and as part of Joint All Domain Command and Control (JADC2), thus increasing our war-fighters' lethality, maneuverability, and survivability. In addition to launch services, this line may fund mission unique requirements such as launch vehicle hardware, procurement of flight representative interface hardware for pre-launch integration and test, early integration studies to document Space Vehicle-Launch Vehicle (SV-LV) interface controls and provide the predicted launch vehicle environments to the SV providers, final integration analysis and interface control documents, encapsulation and payload attach fitting mate operations of the SV integrated payload stack, and conduct launch and orbit insertion operations.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SDALCH / Space Development Agency Launch	Item Number / Title [DODIC]: Space Development Agency Launch
--	--	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity <i>(Units in Each)</i>	-	7	5	4	-	4
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	854.288	529.468	357.178	-	357.178
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	-	854.288	529.468	357.178	-	357.178
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	-	854.288	529.468	357.178	-	357.178

(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>	-	122.041	105.894	89.295	-	89.295

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

Cost Elements	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
Launch - Space Development Agency Launch Cost																		
Non Recurring Cost																		
NSSL Launch Services	-	-	-	122.041	7	854.288	105.894	5	529.468	89.294	4	357.178	-	-	-	89.295	4	357.178
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	854.288	-	-	529.468	-	-	357.178	-	-	-	-	-	357.178
<i>Subtotal: Launch - Space Development Agency Launch Cost</i>	-	-	-	-	-	854.288	-	-	529.468	-	-	357.178	-	-	-	-	-	357.178
Gross/Weapon System Cost	-	-	-	122.041	7	854.288	105.894	5	529.468	89.295	4	357.178	-	-	-	89.295	4	357.178

Remarks:

SDA will utilize the United States Space Force (USSF) National Security Space Launch (NSSL) services. The funding represents SDA's contribution to the cost of those services.

FY 2023 funded eight launch missions, with one from the FY 2023 OMNIBUS reprogramming action. The Resource Summary table did not get updated to reflect the additional launch; the correct FY 2023 quantity is 8.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: SPCMOD / Space Mods
---	---

ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
--	---	--

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	13.126	68.131	166.596	48.152	-	48.152	45.811	46.944	47.900	48.866	-	485.526
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	13.126	68.131	166.596	48.152	-	48.152	45.811	46.944	47.900	48.866	-	485.526
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	13.126	68.131	166.596	48.152	-	48.152	45.811	46.944	47.900	48.866	-	485.526

(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 funding enables 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.

The following Program Elements are represented in this Budget Line Item:

PE 1203160SF DEFENSE METEOROLOGICAL SATELLITE PROGRAM (DMSP):

The DEFENSE METEOROLOGICAL SATELLITE PROGRAM (DMSP), COMMAND, CONTROL, and COMMUNICATIONS (C3) GROUND SYSTEM (GS) (DC3GS) is the ground system that supports DMSP, a fully operational program supporting a broad range of national security users who require timely and accurate global weather information. DMSP is a DoD-only 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). Critical DC3GS component spares have been depleted, parts cannibalized, and are no longer sustainable. Therefore, DC3GS subsystems to be addressed include, but are not limited to the Link/2 Communication System, and Mission Planning and scheduling System. Current DMSP planned fly-out date is FY 2027, recent guidance has been that if the system is capable, it may continue to fly past that date. This selective re-capitalization effort is intended to ensure the DC3GS remains viable and serviceable to support DMSP while it remains in flight.

PE 1203165SF 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 United States Nuclear Detonation (NUDET) Detection System (USNDS) 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 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

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPCMOD / Space Mods
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
Line Item MDAP/MAIS Code: N/A		
<p>equipment, including multi-million dollar satellites. OCS is required to operate until the Next Generation Operational Control System (OCX) transitions to operations, to include support for GPS III and fielding of Military GPS User Equipment (MGUE).</p> <p>PE 1203699SF Shared Early Warning System (SEWS):</p> <p>The Shared Early Warning System (SEWS) provides accurate and timely missile warning information generated by space-based infrared sensors. This information is distributed to three combatant commands (CCMDs)--US European Command (USEUCOM), US Central Command (USCENTCOM), and US Indo-Pacific Command (USINDOPACOM); North Atlantic Treaty Organization (NATO); and multiple foreign partner nations located within each of the serviced CCMDs. 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 SFB, CO to secondary distribution facilities located with the CCMDs 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 utilizes 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).</p> <p>PE 1203873SF Ballistic Missile Defense Radars (BMD Radars):</p> <p>COBRA DANE is the most powerful, sensitive, and accurate Ground-based Midcourse Defense (GMD) radar and the premier Ballistic Missile Defense (BMD) radar. At the same time, it is the most accurate and capable phased array available to the Space Surveillance Network (SSN) for cataloging hazardous and difficult-to-track satellites and space debris objects that clutter the near-earth orbital regime that cannot be detected by most other SSN tracking assets.</p> <p>COBRA DANE has two primary missions. One is to support US Strategic Command's (USSTRATCOM) BMD mission by providing midcourse coverage for the Ballistic Missile Defense System (BMDS). COBRA DANE detects Intercontinental Ballistic Missiles (ICBMs) and Sea-Launched Ballistic Missiles (SLBMs), classifies reentry vehicles (RVs) and other missile objects, provides real-time information to the GMD Fire Control (GFC), and provides tracking of threat ballistic missiles with sufficient accuracy to commit the launch of interceptors and to update the target tracks to the interceptor while the interceptor is in flight.</p> <p>COBRA DANE's other primary mission is to support US Space Command's (USSPACECOM) Space Domain Awareness (SDA) mission by detecting, tracking, correlating, and characterizing man-made resident space objects, primarily in the Low-Earth Orbit (LEO) regime, including space debris and early observation of New Foreign Launches (NFLs). It operates as part of the larger SSN and provides metric observation data to its command and control nodes: the Combined Space Operations Center (CSpOC) and the Distributed Space Command and Control - Dahlgren (DSC2-D). COBRA DANE also supports USSPACECOM's Space Object Identification (SOI) mission by providing narrowband radar data of man-made resident space objects in the LEO regime. SOI information is used to ascertain the mission and operational status of various payloads and aids in forecasting maneuvers or deorbits. COBRA DANE mission equipment and associated sustainment suites consist of a mix of unique, custom-built components that are increasingly difficult to maintain on a 45-year-old radar due to non-availability of replacement parts. Subsystems are no longer supported by the original equipment manufacturers. In addition, transmitter groups, traveling wave tubes, time delay units and all associated components and spares require replacement. Due to the limited demand rates for spares, and indefinite system lifespan, life-of-type buys may be required to support this weapon system. Without these replacements, there is a high risk that equipment failures will cause unacceptable mission downtime. Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.</p> <p>PE 1203906SF Cheyenne Mountain Complex:</p> <p>The North American Aerospace Defense Command (NORAD) Cheyenne Mountain Complex (NCCMC) - Integrated Tactical Warning/Attack Assessment (ITW/AA) system provides timely, unambiguous, and continuous warning and attack assessment of air, missile and space threats to North America, and geographical theaters. This system integrates and correlates missile launch and air surveillance information from certified sources to assess the nature of an enemy launch/attack and issue warnings to the President of the United States, Canadian National Leadership, United States Secretary of Defense, National Military Command Center and war-fighting Combatant Commanders. NCCMC-ITW/AA and Legacy Space Command and Control (C2) systems provide NORAD/US Northern Command (USNORTHCOM), USSTRATCOM, and USSPACECOM command structures with the information management, decision aids, and connectivity required to monitor, assess, plan, and execute assigned strategic, space operations, and missile defense missions. It provides Nuclear C2 and detonation detection.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPCMOD / Space Mods
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
Line Item MDAP/MAIS Code: N/A		
PE 1203909SF Ballistic Missile Early Warning System (BMEWS):		
<p>BMEWS consists of ground based, AN/FPS-132 Upgraded Early Warning Radars (UEWRs) located at Pituffik Space Base, Greenland; Clear Space Force Station (SFS), AK; and Royal Air Force (RAF) Fylingdales, UK , Beale AFB, CA and Cape Cod SFS, MA. Additionally, there is a site for testing located in the Centralized Integration Support Facility (CISF) at Peterson Space Force Base (SFB), CO. These systems provide Missile Defense, Missile Warning, and SDA data to multiple users. The radar system provides USSTRATCOM with credible ITW/AA data on all Intercontinental Ballistic Missiles (ICBMs) penetrating the coverage area including Launch and Predicted Impact (L&PI) data for attack assessment and response determination. The radar system also supports the SSN providing near-earth satellite surveillance and tracking, reporting observational (metric), SOI on man-made satellites and maintenance of the space catalog as required by the Combined Space Operations Center, Alternate Space Operations Center, and the National Air and Space Intelligence Center mitigating the significantly increasing potential for collisions with national assets, including manned space platforms.</p> <p>The UEWR 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 Commercial-off-the-Shelf (COTS)-based subsystems that are no longer supported by the original equipment manufacturers. In addition, radar transmit and receive components, processing equipment, 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. Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.</p>		
PE 1203912SF SEA-LAUNCHED BALLISTIC MISSILE (SLBM) RADAR WARNING SYSTEM:		
<p>The primary mission of the SLBM Radar Warning System provides USSTRATCOM with credible ITW/AA data on all SLBMs penetrating the coverage area. This data includes an estimation of L&PI locations and times. The secondary mission is to provide the Cheyenne Mountain Space Force Station, CO (CMSFS) and other users with ITW/AA data on ICBMs penetrating the coverage area. Additionally, Perimeter Acquisition Radar Attack Characterization System (PARCS) supports the SDA 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.</p> <p>The SLBM Detection and Warning System currently consists of: the AN/FPQ-16 PARCS, located at Cavalier SFS, ND. Additionally, there is a site for testing located in the CISF at Peterson SFB, CO. The PARCS 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. Funding may be used to address DMS issues.</p>		
PE 1203940SF Space Situation Awareness Operations (SSAO):		
<p>Ionospheric Ground Sensors (IGS) - SSAO enables surveillance of space objects and monitoring of space environmental conditions that can affect space warfighting operations. The Space Force operates and sustains several systems and tools to monitor space environmental conditions, including Ionospheric Ground Sensors (IGS) such as Next Generation Ionosonde (NEXION), Ionospheric Scintillation Total Electron Content (TEC) Observer (ISTO), and other associated equipment. IGS contributes to Intelligence, Surveillance, Reconnaissance, Environment (ISRE), permitting full space domain knowledge, which enables Space Domain Awareness (SDA) Data Integration & Exploitation (DI&E) key to timely Battle Management Command and Control (BMC2) decision making/tasking. NEXION is a commercial-off-the-shelf (COTS) vertical incidence low-power radar sensor that obtains measurements of the ionosphere from directly overhead in the high-frequency (HF) radio bands (2-30 MHz). ISTO is an equatorial network of ground-based, passive, COTS receivers that measure ionospheric scintillation and total electronic content in real-time by analyzing Ultra High Frequency (UHF) and Global Positioning System (GPS) L-band satellite signals.</p>		
PE 1203940SF Space Situation Awareness Operations (SSAO):		
<p>Solar Electro-Optical Network (SEON) - Consists of AN /FMQ-7 Solar Observing Optical Network (SOON) and Radio Solar Telescope Network (RSTN) which includes AN /FRR-95 Radio Interference Measuring Set (RIMS) and A/F24U-10 Solar Radio Spectrograph (SRS). SOON provides optical observance of the sun and RSTN provides Radio Frequency (RF) monitoring of the sun and is an all-weather, ground-based, stand-alone system for the detection of solar bursts. SEON provides 24/7 real-time data of solar activity that interferes with radio frequency bands of satellites, radars, radio communications, and power grids.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPCMOD / Space Mods
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
Line Item MDAP/MAIS Code: N/A		
<p>Moreover, it provides data on solar phenomena that have the potential to damage military surveillance and warning satellites, damaged satellite tracking systems, and affect RF and satellite orbital prediction management. This solar data is also used in the prediction of increases or decreases in solar activity.</p> <p>PE 1203940SF Space Situation Awareness Operations (SSAO):</p> <p>TAPOUT is a Low Earth Orbit (LEO) tactical SDA system which consists of a Hardware Layer, a Data Layer, and an Application layer. The planned Hardware Layer is the result of two years of prototyping, analysis, and collaboration with industry. Sixteen sites have been identified to field daytime/nighttime capable ground based Electro-Optical (EO) sensors which will be remotely commanded and controlled through the Data and Application layers. The Data Layer consists of multi-source and multi-intelligence data feeds which are aggregated at a classified level where predictive threat warning occurs. The Application Layer consists of a series of Threat Warning and C2 applications at multiple classification levels which enable monitoring and tactical command and control of the network.</p> <p>PE 1205111SF Weather Service:</p> <p>AN/UMQ-13 Meteorological Data Station (MARK IV-B) - MARK IV-B provides warfighters tactical access to timely, accurate data from the latest generation of satellites and sensors to make mission critical decisions affecting the safety of personnel and equipment. MARK IV-B systems receive, process, display, store, and distribute interrogatable meteorological satellite (METSAT) information to operational users worldwide to support warfighter planning and execution via unclassified and classified networks. This system also provides cloud modeling and forecast validation data for the AF Weather Weapon System (AFWWS).</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs **P-1 Line Item Number / Title:** SPCMOD / Space Mods

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** 1203906SF **Other Related Program Elements:** 1203699SF

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	NAVSTAR Global Positioning				- / 0.081	- / 1.376	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40a	Shared Early Warning System (SEWS)				- / -	- / 0.372	- / 0.385	- / 0.393	- / -	- / 0.393
P-40a	Ballistic Missile Defense Radars				- / -	- / 18.116	- / -	- / -	- / 0.000	- / 0.000
P-40a	Ballistic Missile Defense Radars				- / 0.000	- / 0.000	- / 51.779	- / 0.000	- / 0.000	- / 0.000
P-40a	Cheyenne Mountain Complex				- / 2.702	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40a	Cheyenne Mountain Complex				- / -	- / 0.100	- / 0.103	- / 0.103	- / -	- / 0.103
P-40a	Ballistic Missile Early Warning				- / 8.439	- / 0.000	- / 12.497	- / 6.355	- / 0.000	- / 6.355
P-3a	1 / Ballistic Missile Early Warning (Reliability & Maintainability)		A		- / 0.000	- / 0.000	- / 20.544	- / 18.954	- / 0.000	- / 18.954
P-3a	2 / Ballistic Missile Early Warning (Reliability & Maintainability)		A		- / 0.000	- / 0.000	- / 4.278	- / 8.338	- / 0.000	- / 8.338
P-40a	Ballistic Missile Early Warning				- / -	- / 29.119	- / 64.470	- / 3.800	- / -	- / 3.800
P-40a	Submarine-Launched Ballistic Missile				- / 0.798	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	1 / PARCS Block 02 (Reliability & Maintainability)		A		- / 1.106	- / 3.995	- / 6.466	- / 6.326	- / 0.000	- / 6.326
P-40a	Space Situational Awareness Operations				- / -	- / 13.835	- / 5.300	- / 3.088	- / -	- / 3.088
P-40a	Weather Service				- / -	- / 1.218	- / 0.774	- / 0.795	- / -	- / 0.795
P-40	Total Gross/Weapon System Cost				- / 13.126	- / 68.131	- / 166.596	- / 48.152	- / -	- / 48.152

Exhibits Schedule					FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	NAVSTAR Global Positioning				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 1.457
P-40a	Shared Early Warning System (SEWS)				- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Ballistic Missile Defense Radars				- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Ballistic Missile Defense Radars				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 51.779
P-40a	Cheyenne Mountain Complex				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 2.702
P-40a	Cheyenne Mountain Complex				- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Ballistic Missile Early Warning				- / 12.717	- / 22.096	- / 36.795	- / 37.924	- / 0.000	- / 136.823
P-3a	1 / Ballistic Missile Early Warning (Reliability & Maintainability)		A		- / 18.699	- / 14.245	- / 0.300	- / -	- / -	- / 72.742
P-3a	2 / Ballistic Missile Early Warning (Reliability & Maintainability)		A		- / 3.821	- / 0.000	- / 0.000	- / -	- / -	- / 16.437
P-40a	Ballistic Missile Early Warning				- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Submarine-Launched Ballistic Missile				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.798
P-3a	1 / PARCS Block 02 (Reliability & Maintainability)		A		- / 5.792	- / 5.915	- / 6.013	- / 6.040	- / -	- / 41.653
P-40a	Space Situational Awareness Operations				- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Weather Service				- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost				- / 45.811	- / 46.944	- / 47.900	- / 48.866	- / -	- / 485.526

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPCMOD / Space Mods
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
Line Item MDAP/MAIS Code: N/A		
*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, Space Mods P-40A Category UEWR Block 02 Update Item Beam Steering Unit, is a new start.
 This program, Space Mods P-40A Category UEWR Block 07 Update Item Data Processor Signal Processor (DP/SP) Suite of Components, is a new start.

Space Mods P-40A Category UEWR Block 02 Update Item Beam Steering Unit, is a new start within the Ballistic Missile Early Warning System (BMEWS) PE 1203909SF.
 Space Mods P-40A Category UEWR Block 07 Update Item Data Processor Signal Processor (DP/SP) Suite of Components, is a new start within the BMEWS PE 1203909SF

Defense Meteorological Satellite Program (SPACE):

PE 1203160SF: No FY 2025 funding requested.

NAVSTAR Global Positioning (P-40a):

NAVSTAR GPS: PE 1203165SF: No FY 2025 funding requested.

Shared Early Warning System (SEWS) (P-40a):

FY 2025 funding will fund ongoing program support costs for SEWS modification efforts and will fund capital equipment replacement to replace outdated components such as, but not limited to, virtual processors, routers, intrusion detection software, network logging software, and other material solutions required for operational and cybersecurity continuity. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system. SEWS utilizes both COTS and Government Off-the-Shelf (GOTS) equipment to comply with emerging threat capability requirements.

This effort is funded in PE 1203699SF Shared Early Warning System (SEWS).

Ballistic Missile Defense Radars (P-3a):

COBRA DANE Block 00: No FY 2025 funding requested.

This Effort is funded in PE 1203873SF - Ballistic Missile Defense Radars (BMDR)

Cheyenne Mountain Complex (P-40a):

NORAD CHEYENNE MOUNTAIN COMPLEX-INTEGRATED TACTICAL WARNING/ATTACK ASSESSMENT (NCCM-ITW/AA) SYSTEMS: FY 2025 funding procures replacement for reliability and maintainability of the information systems hardware and associated systems software for the NCCM-ITW/AA system and continues program support. Program support includes acquisition support/strategy, engineering and technical expertise associated with procurement, support services, test, travel and other program-related costs associated with install of procurement equipment. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support weapons system modifications across the active NCCM-ITW/AA Block programs.
 This effort is funded in PE 1203906SF - Cheyenne Mountain Complex.

Ballistic Missile Early Warning System (BMEWS)/PAVE PHASED ARRAY WARNING SYSTEM (PAVE PAWS) Block 00, Block 01, Block 02, Block 03, Block 04, Block 05, Block 06 and Block 07 (P3a, P-40a):

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPCMOD / Space Mods
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
Line Item MDAP/MAIS Code: N/A		
<p>Block 00: FY 2025 funding will fund ongoing program support costs associated with the Sub-Array Power Supply (SAPS) - Energy Savings (SAPS-ES) upgrade, which replaces legacy and obsolete SAPS units, and any unsupportable mission and support equipment, initial spares, and lifetime buys of spares. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.</p> <p>Block 01: FY 2025 funding will fund ongoing program support cost associated with Array Group Drivers (AGD) upgrade, which replaces legacy and obsolete AGD units, and any unsupportable mission and support equipment, initial spares, and lifetime buys of spares. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.</p> <p>Block 02: FY 2025 funding will fund ongoing program support cost associated with Beam Steering Unit (BSU) upgrade, which replaces legacy and obsolete BSU units, and any unsupportable mission and support equipment, initial spares, and lifetime buys of spares. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.</p> <p>Block 03: FY 2025 funding will fund ongoing program support costs for UEWR modification efforts and will initiate procurement of Capital Equipment Replacement of unsupportable mission and support equipment, initial spares, and lifetime buys of spares to include, but not limited to Frequency Timing Standards (FTS), and associated components. The Department of Defense (DoD)/Chief Information Officer (CIO) mandated timing transition to the Defense Information Systems Agency (DISA) Timing & Synchronization (TSSC) system. This project will replace the current GPS antennas utilized for timing and synchronization of UEWR by integrating the UEWR FTS with the recently deployed TSSC system. Due to the limited spares, demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.</p> <p>Block 04: FY 2025 funding will fund ongoing program support costs for UEWR modification efforts and will initiate procurement and deployment of Capital Equipment Replacement of unsupportable mission and support equipment, initial spares, and lifetime buys of spares to include, but not limited to, the Transitional Receiver Exciter (T-REX) and associated components. The T-REX replaces legacy and obsolete REX cabinets. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.</p> <p>Block 05: FY 2025 funding will fund program support costs for UEWR modification efforts and will initiate procurement and deployment of Capital Equipment Replacement of unsupportable mission and support equipment, initial spares, and lifetime buys of spares to include, but not limited to, the Digital Receiver Exciter (DREX)/Digital Radio Frequency Modulator (DRFM), the Radio Frequency (RF) Switch, and associated components. The DREX/DRFM replaces legacy equipment to include the Receive Beam Former (RBF), Radio Frequency Monitor (RFM) and Receiver-Exciter (REX). Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.</p> <p>Block 06: FY 2025 funding will fund ongoing UEWR modification efforts and will initiate procurement and deployment of Capital Equipment Replacement of unsupportable mission and support equipment, initial spares, and lifetime buys of spares to include, but not limited to, the Chatter Box and associated components. The Chatter Box upgrade is required by the October 2021 DoD Chief Information Officer (CIO) memo that directs all programs to migrate all components from Time Division Multiplex data transport to Internet Protocol-based services prior to the expiration of their current contract for legacy services and no later than March 2025 for increased cybersecurity. In addition, the Chatter Box program replaces legacy and obsolete External Communications Processor and External Interface Gateway cabinets. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.</p> <p>Block 07: FY 2025 funding will fund program support costs for Data Processor/Signal Processor (DP/SP) suite modification efforts and will fund Capital Equipment Replacement of unsupportable mission and support equipment components and subsystems to address evolving space and missile threats to include, but not limited to, the DP/SP and the Redundant Array of Independent Drives (RAID) suite replacement. Without these modifications there is a high risk that Information Assurance issues and equipment failures will cause unacceptable mission downtime. Due to the limited spares demand rates, and indefinite system lifespan, life-of-need buys may be required to support this weapon system.</p> <p>This effort is funded in PE 1203909SF Ballistic Missile Early Warning System (BMEWS)</p> <p>Perimeter Acquisition Radar Attack Characterization System (PARCS) Block 02 (P-3a):</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPCMOD / Space Mods
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
Line Item MDAP/MAIS Code: N/A		
<p>FY 2025 funding will fund Block 02 by continuing modifications to the PARCS system for the replacement of unsupportable and unreliable components to include, 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, Power Amplifiers, and any associated initial spares. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system. Additionally, FY 2025 will fund ongoing program support costs for the Block 02 program. PARCS funding procures replacement components for unsupportable, unobtainable, and unreliable system components. PARCS equipment is composed of custom-built components that became obsolete in the 1980s. 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.</p> <p>The effort is funded in PE 1203912SF Sea Launched Ballistic Missile (SLBM) Detection and Warning System.</p> <p>Thule A8 Repair (P-40a):</p> <p>No FY 2025 funding requested.</p> <p>This effort is funded in PE 1203909SF Ballistic Missile Early Warning System (BMEWS).</p> <p>Ionospheric Ground Sensors (IGS) (P-40a):</p> <p>IGS: FY 2025 funding will complete NEXION site feasibility surveys and procure and install NEXION sensors at selected sites.</p> <p>The effort is funded in PE 1203940SF Space Situation Awareness Operations (SSAO).</p> <p>TAPOUT (P-40a):</p> <p>TAPOUT:</p> <p>This effort is funded in PE 1203940SF Space Situation Awareness Operations (SSAO)</p> <p>No FY 2025 funding requested.</p> <p>Solar Electro-Optical Network (SEON) (P-40a):</p> <p>SEON: FY 2025 funding will procure parts and installation of modern RSTN radios, RIMS pedestals, and 28-foot antennas at SEON sites.</p> <p>Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, experimentation, prototyping, and activities that may leverage commercial and international opportunities.</p> <p>The effort is funded in PE 1203940SF Space Situation Awareness Operations.</p> <p>AN/UMQ-13 Meteorological Data Station (MARK IV-B) (P-40a):</p> <p>MARK IV-B: FY 2025 funding will procure two radomes to protect MARK IV-B assets at Elmendorf AFB, Alaska, from adverse weather and corrosive elements. The current radomes at Elmendorf AFB are over 20 years old and are approaching end of life.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPCMOD / Space Mods
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203906SF	Other Related Program Elements: 1203699SF
Line Item MDAP/MAIS Code: N/A		
<p>The effort is funded in PE 1205111SF Weather Service.</p> <p>STARCOM Range and Aggressors:</p> <p>Funding in this program provides realistic and relevant threat replication, through Commercial off-the-shelf (COTS) GPS and SATCOM equipment. Current equipment is over 10 years old, failing, antiquated and therefore does not accurately replicate existing adversary threats due to system limitations. Procurement funding will provide a 166% increase SATCOM availability and 120% increase in GPC electronic attack assets used to replicate adversary counter-space operations in support of Joint training audiences. Funds provide recapitalization of five SATCOM equipment assets and eight GPS assets within FY23-25; FY26 and beyond provides a steady-state sustainment and replacement cycle for both SATCOM and GPS assets. Without funding, the space aggressors are at risk of significant degradation in their threat replication capabilities. Aging equipment will prevent the space aggressors from providing a realistic threat environment and degrade our ability to train joint and coalition partners in a contested, degraded, operationally-limited space environment.</p> <p>The effort is funded in PE 1208736SF Space Range and Adversary.</p> <p>Efforts with funding starting in FY 2026 through FY 2029 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 2026 Cost Delta: 4.782 million(b) FY 2027 Cost Delta: 4.688 million(c) FY 2028 Cost Delta: 4.792 million(d) FY 2029 Cost Delta: 4.902 million(e) FY Total Cost Delta: 161.135 million		

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Aggregated Modification Items Title: NAVSTAR Global Positioning
--	---	---

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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-1 / NAVSTAR GPS-OCS COTS UPGRADE			-	-	0.081	-	-	1.376	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	0.081	-	-	1.376	-	-	0.000									

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2026			FY 2027			FY 2028			FY 2029			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-1 / NAVSTAR GPS-OCS COTS UPGRADE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.457
Total			-	-	0.000	-	-	1.457												

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-1 / NAVSTAR GPS-OCS COTS UPGRADE	Blackhawk and IIR Flight Nav Systems	Capability Improvement

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** SPCMOD / Space Mods **Aggregated Items Title:** Shared Early Warning System (SEWS)

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
SEWS																				
Outdated Component Replacement Modification	A		-	-	-	0.372	1	0.372	0.385	1	0.385	0.393	1	0.393	-	-	-	0.393	1	0.393
Subtotal: SEWS			-	-	-	-	-	0.372	-	-	0.385	-	-	0.393	-	-	-	-	-	0.393
Total			-	-	-	-	-	0.372	-	-	0.385	-	-	0.393	-	-	-	-	-	0.393

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 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Aggregated Items Title: Ballistic Missile Defense Radars
--	---	--

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)		
Block 00																						
Transmitter Section	A		-	-	-	18.116	1	18.116	-	-	-	-	-	-	-	-	-	-	0.000	-	-	0.000
Subtotal: Block 00			-	-	-	-	-	18.116	-	-	-	-	-	-	-	-	-	-	0.000	-	-	0.000
Total			-	-	-	-	-	18.116	-	-	-	-	-	-	-	-	-	-	0.000	-	-	0.000

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 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** SPCMOD / Space Mods **Aggregated Modification Items Title:** Ballistic Missile Defense Radars

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 Block 00 / Ballistic Missile Defense Radars			-	-	-	-	-	-	-	51.779	-	-	-	-	-	-	-	-	-	
Total			-	-	0.000	-	-	0.000	-	-	51.779	-	-	0.000	-	-	0.000	-	-	0.000
Item Number / Title	ID CD	MDAP/MAIS Code	FY 2026			FY 2027			FY 2028			FY 2029			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 Block 00 / Ballistic Missile Defense Radars			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51.779
Total			-	-	0.000	-	-	51.779												

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 Block 00 / Ballistic Missile Defense Radars	NA	Reliability & Maintainability

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Aggregated Modification Items Title: Cheyenne Mountain Complex
--	---	--

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
NCMCB4 / NORAD Cheyenne Mountain Complex Block 04			-	-	2.315	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NCMCB5 / Block 05			-	-	0.387	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	2.702	-	-	0.000												

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2026			FY 2027			FY 2028			FY 2029			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)
NCMCB4 / NORAD Cheyenne Mountain Complex Block 04			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.315
NCMCB5 / Block 05			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.387
Total			-	-	0.000	-	-	2.702												

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
NCMCB4 / NORAD Cheyenne Mountain Complex Block 04	NORADCheyenneMountainComplex	Reliability & Maintainability
NCMCB5 / Block 05	NORADCheyenneMountainComplex	Reliability & Maintainability

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Aggregated Items Title: Cheyenne Mountain Complex
--	---	---

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
NCMC																				
Hardware	A		-	-	-	0.100	1	0.100	0.103	1	0.103	0.103	1	0.103	-	-	-	0.103	1	0.103
Subtotal: NCMC			-	-	-	-	-	0.100	-	-	0.103	-	-	0.103	-	-	-	-	-	0.103
Total			-	-	-	-	-	0.100	-	-	0.103	-	-	0.103	-	-	-	-	-	0.103

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 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** SPCMOD / Space Mods **Aggregated Modification Items Title:** Ballistic Missile Early Warning

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
BMEWS-UEWR-Block-03 / Ballistic Missile Early Warning			-	-	-	-	-	-	-	11.829	-	-	3.000	-	-	-	-	-	3.000	
BMEWS-UEWR-Block-05 / Ballistic Missile Early Warning (BMEWS)			-	-	-	-	-	-	-	0.668	-	-	3.355	-	-	-	-	-	3.355	
BMEWS-1 / BPP Block 02			-	-	4.439	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
BMEWS-3 / DPSP			-	-	4.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	8.439	-	-	0.000	-	-	12.497	-	-	6.355	-	-	0.000	-	-	6.355

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2026			FY 2027			FY 2028			FY 2029			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)
BMEWS-UEWR-Block-03 / Ballistic Missile Early Warning			-	-	0.400	-	-	0.600	-	-	-	-	-	-	-	-	-	-	-	15.829
BMEWS-UEWR-Block-05 / Ballistic Missile Early Warning (BMEWS)			-	-	12.317	-	-	21.496	-	-	36.795	-	-	37.924	-	-	-	-	-	112.555
BMEWS-1 / BPP Block 02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.439
BMEWS-3 / DPSP			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.000
Total			-	-	12.717	-	-	22.096	-	-	36.795	-	-	37.924	-	-	0.000	-	-	136.823

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
BMEWS-UEWR-Block-03 / Ballistic Missile Early Warning	NA	Reliability & Maintainability
BMEWS-UEWR-Block-05 / Ballistic Missile Early Warning (BMEWS)	NA	Reliability & Maintainability
BMEWS-1 / BPP Block 02	NA	Reliability & Maintainability
BMEWS-3 / DPSP	TBD	Reliability & Maintainability

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force	Date: March 2024
---	-------------------------

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Modification Number / Title: 1 / Ballistic Missile Early Warning
--	---	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	0.000	0.000	20.544	18.954	0.000	18.954	18.699	14.245	0.300	-	-	72.742
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	0.000	0.000	20.544	18.954	0.000	18.954	18.699	14.245	0.300	-	-	72.742
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	0.000	0.000	20.544	18.954	0.000	18.954	18.699	14.245	0.300	-	-	72.742

(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:

Block 04: FY 2025 will fund ongoing program support costs for UEWR modification efforts and will initiate procurement and deployment of Capital Equipment Replacement of unsupportable mission and support equipment, initial spares, and lifetime buys of spares to include, but not limited to, the Transitional Receiver Exciter (T-REX) and associated components. The T-REX replaces legacy and obsolete REX cabinets. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.

Milestone/Development Status

N/A

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force										Date: March 2024			
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10					P-1 Line Item Number / Title: SPCMOD / Space Mods					Modification Number / Title: 1 / Ballistic Missile Early Warning			
ID Code (A=Service Ready, B=Not Service Ready) : A							MDAP/MAIS Code:						
Models of Systems Affected: NA				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	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: TREX</i>													
B Kits													
Recurring													
TREX:EQUIPMENT Group B (Active)	- / -	- / -	4 / 18.167	3 / 15.194	- / -	3 / 15.194	5 / 14.899	3 / 11.645	- / -	- / -	- / -	15 / 59.905	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 18.167	- / 15.194	- / -	- / 15.194	- / 14.899	- / 11.645	- / -	- / -	- / -	- / 59.905	
<i>Subtotal: TREX</i>	- / -	- / -	- / 18.167	- / 15.194	- / -	- / 15.194	- / 14.899	- / 11.645	- / -	- / -	- / -	- / 59.905	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 18.167	- / 15.194	- / -	- / 15.194	- / 14.899	- / 11.645	- / -	- / -	- / -	- / 59.905	
Support (All Modification Items)													
A&AS	- / -	- / -	- / 12.377	- / 13.360	- / -	- / 13.360	- / 3.500	- / 2.100	- / -	- / -	- / -	- / 11.337	
<i>Subtotal: Support</i>	- / -	- / -	- / 12.377	- / 13.360	- / -	- / 13.360	- / 3.500	- / 2.100	- / -	- / -	- / -	- / 11.337	
Installation													
<i>Modification Item 1 of 1: TREX</i>													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	4 / 0.400	- / -	4 / 0.400	3 / 0.300	5 / 0.500	3 / 0.300	- / -	- / -	15 / 1.500	
<i>Total</i>													
Total Cost (Procurement + Support + Installation)	0.000	0.000	20.544	18.954	0.000	18.954	18.699	14.245	0.300	-	-	72.742	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Modification Number / Title: 1 / Ballistic Missile Early Warning
--	---	--

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

Modification Item 1 of 1: TREX

Manufacturer Information

Manufacturer Name: Georgia Technical Research Institute	Manufacturer Location: Georgia
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 15

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates		Feb 2024	Feb 2025	Jan 2026	Jan 2027		
Delivery Dates		May 2025	May 2026	Apr 2027	Apr 2028		

Installation Information

Method of Implementation: Contractor Facility

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	4 / 0.400	- / -	4 / 0.400	- / -	- / -	- / -	- / -	- / -	4 / 0.400
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.300	- / -	- / -	- / -	- / -	3 / 0.300
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.500	- / -	- / -	- / -	5 / 0.500
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.300	- / -	- / -	3 / 0.300
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	4 / 0.400	- / -	4 / 0.400	3 / 0.300	5 / 0.500	3 / 0.300	- / -	- / -	15 / 1.500

Installation Schedule

	PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
		Q1	Q2	Q3	Q4																										
In	0	-	-	-	-	-	-	-	-	-	-	4	-	-	-	3	-	-	-	5	-	-	-	3	-	-	-	-	-	0	15
Out	0	-	-	-	-	-	-	-	-	-	-	4	-	-	-	3	-	-	-	5	-	-	-	3	-	-	-	-	-	0	15

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Modification Number / Title: 2 / Ballistic Missile Early Warning

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	0.000	4.278	8.338	0.000	8.338	3.821	0.000	0.000	-	-	16.437
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	0.000	4.278	8.338	0.000	8.338	3.821	0.000	0.000	-	-	16.437
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	0.000	4.278	8.338	0.000	8.338	3.821	0.000	0.000	-	-	16.437

(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:

Block 06: FY 2025 will fund ongoing program support costs for UEWR modification efforts and will initiate procurement and deployment of Capital Equipment Replacement of unsupportable mission and support equipment, initial spares, and lifetime buys of spares to include, but not limited to, the Chatter Box and associated components. The Chatter Box upgrade satisfies the DoD Chief Information Officer (CIO) memo dated 18 October 2021 that states "Long haul network providers and industry partners are no longer providing Time Division Multiplexing technologies. Furthermore, the CIO memo directs programs to "Migrate all Components' mission requirements for transport to Internet Protocol based services prior to the expiration of their current contract for legacy services and no later than March 2025. The Chatter Box program also replaces legacy and obsolete External Communications Processor and External Interface Gateway cabinets. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system.

Milestone/Development Status

N/A

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force										Date: March 2024			
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10					P-1 Line Item Number / Title: SPCMOD / Space Mods					Modification Number / Title: 2 / Ballistic Missile Early Warning			
ID Code (A=Service Ready, B=Not Service Ready) : A							MDAP/MAIS Code:						
Models of Systems Affected: NA				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	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: Chatter Box</i>													
B Kits													
Recurring													
Chatter Box:EQUIPMENT Group B (Active)	- / -	- / -	2 / 3.733	3 / 6.635	- / -	3 / 6.635	1 / 2.921	- / -	- / -	- / -	- / -	6 / 13.289	
<i>Subtotal: Recurring</i>	- / -	- / -	- / 3.733	- / 6.635	- / -	- / 6.635	- / 2.921	- / -	- / -	- / -	- / -	- / 13.289	
<i>Subtotal: Chatter Box</i>	- / -	- / -	- / 3.733	- / 6.635	- / -	- / 6.635	- / 2.921	- / -	- / -	- / -	- / -	- / 13.289	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / -	- / 3.733	- / 6.635	- / -	- / 6.635	- / 2.921	- / -	- / -	- / -	- / -	- / 13.289	
Support (All Modification Items)													
A&AS	- / -	- / -	- / 0.545	- / 1.503	- / -	- / 1.503	- / 0.500	- / -	- / -	- / -	- / -	- / 2.548	
<i>Subtotal: Support</i>	- / -	- / -	- / 0.545	- / 1.503	- / -	- / 1.503	- / 0.500	- / -	- / -	- / -	- / -	- / 2.548	
Installation													
<i>Modification Item 1 of 1: Chatter Box</i>	- / -	- / -	- / -	2 / 0.200	- / -	2 / 0.200	4 / 0.400	- / -	- / -	- / -	- / -	6 / 0.600	
<i>Subtotal: Installation</i>	- / -	- / -	- / -	2 / 0.200	- / -	2 / 0.200	4 / 0.400	- / -	- / -	- / -	- / -	6 / 0.600	
Total													
Total Cost (Procurement + Support + Installation)	0.000	0.000	4.278	8.338	0.000	8.338	3.821	0.000	0.000	-	-	16.437	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Modification Number / Title: 2 / Ballistic Missile Early Warning
--	---	--

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

Modification Item 1 of 1: Chatter Box

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 12

Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates		Jan 2024	Jan 2025	Jan 2026			
Delivery Dates		Jan 2025	Jan 2026	Jun 2026			

Installation Information

Method of Implementation: Contractor Facility

Installation Cost	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
	Qty (Each) / Total Cost (\$ M)											
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	2 / 0.200	- / -	2 / 0.200	- / -	- / -	- / -	- / -	- / -	2 / 0.200
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.300	- / -	- / -	- / -	- / -	3 / 0.300
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.100	- / -	- / -	- / -	- / -	1 / 0.100
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2029	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	2 / 0.200	- / -	2 / 0.200	4 / 0.400	- / -	- / -	- / -	- / -	6 / 0.600

Installation Schedule

PYS	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029				TC	Tot
	Q1	Q2	Q3	Q4																										
In	0	-	-	-	-	-	-	-	-	-	-	1	1	1	2	1	-	-	-	-	-	-	-	-	-	-	-	0	6	
Out	0	-	-	-	-	-	-	-	-	-	-	1	1	1	2	1	-	-	-	-	-	-	-	-	-	-	-	0	6	

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Aggregated Items Title: Ballistic Missile Early Warning
--	---	---

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
UEWR Block 00 Update																				
Subarray Power	A		-	-	-	14.138	1	14.138	0.293	1	0.293	0.400	1	0.400	-	-	-	0.400	1	0.400
Subtotal: UEWR Block 00 Update			-	-	-	-	-	14.138	-	-	0.293	-	-	0.400	-	-	-	-	-	0.400
UEWR Block 01 Update																				
Array Group Drivers	A		-	-	-	-	-	-	0.600	1	0.600	1.500	1	1.500	-	-	-	1.500	1	1.500
Subtotal: UEWR Block 01 Update			-	-	-	-	-	-	-	-	0.600	-	-	1.500	-	-	-	-	-	1.500
UEWR Block 02 Update																				
Beam Steering Unit	A		-	-	-	-	-	-	-	-	-	1.700	1	1.700	-	-	-	1.700	1	1.700
Subtotal: UEWR Block 02 Update			-	-	-	-	-	-	-	-	-	-	-	1.700	-	-	-	-	-	1.700
Thule A8 Repair																				
J-Plant HEMP Shielding	A		-	-	-	-	-	-	-	-	21.577	-	-	-	-	-	-	-	-	-
Power Generation and Distro System	A		-	-	-	-	-	-	-	-	42.000	-	-	-	-	-	-	-	-	-
Subtotal: Thule A8 Repair			-	-	-	-	-	-	-	-	63.577	-	-	-	-	-	-	-	-	-
UEWR Block 07 Update																				
Data Processor Signal Processor (DP/SP) Suite of Components	A		-	-	-	-	-	-	-	-	-	0.200	1	0.200	-	-	-	0.200	1	0.200
Subtotal: UEWR Block 07 Update			-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200
UEWR Block 03 Update																				
FTS	A		-	-	-	14.981	1	14.981	-	-	-	-	-	0.000	-	-	-	-	-	0.000
Subtotal: UEWR Block 03 Update			-	-	-	-	-	14.981	-	-	-	-	-	0.000	-	-	-	-	-	0.000
Total			-	-	-	-	-	29.119	-	-	64.470	-	-	3.800	-	-	-	-	-	3.800

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 Modification Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** SPCMOD / Space Mods **Aggregated Modification Items Title:** Submarine-Launched Ballistic Missile

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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)
PARCSB1 / PARCS Block 01			-	-	0.798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	0.798	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2026			FY 2027			FY 2028			FY 2029			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)
PARCSB1 / PARCS Block 01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.798	
Total			-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.798

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
PARCSB1 / PARCS Block 01	NA	Reliability & Maintainability

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPCMOD / Space Mods	Modification Number / Title: 1 / PARCS Block 02

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1.106	3.995	6.466	6.326	0.000	6.326	5.792	5.915	6.013	6.040	-	41.653
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1.106	3.995	6.466	6.326	0.000	6.326	5.792	5.915	6.013	6.040	-	41.653
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1.106	3.995	6.466	6.326	0.000	6.326	5.792	5.915	6.013	6.040	-	41.653

(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:

Perimeter Acquisition Radar Attack Characterization System (PARCS) Program Office plans for and procures replacement components for otherwise unsupportable, unobtainable, and unreliable system components. PARCS equipment is composed of custom built components that became obsolete in the 1980s. 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.

This program was previously funded out of Air Force Appropriation 3021 Space Procurement, PEC: 1203912F, BPAC: 23SMOD.

Perimeter Acquisition Radar Attack Characterization System (PARCS) Block 02 (P-3a):

FY 2025 will fund Block 02 by continuing modifications to the PARCS system for the replacement of unsupportable and unreliable components to include, 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, Power Amplifiers, and any associated initial spares. Due to the limited spares demand rates, and indefinite system lifespan, life-of-type buys may be required to support this weapon system. PARCS funding procures replacement components for unsupportable, unobtainable, and unreliable system components. PARCS equipment is composed of custom-built components that became obsolete in the 1980s. 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.

The effort is funded in PE 1203912SF Submarine-Launched Ballistic Missile (SLBM) Detection and Warning System.

Milestone/Development Status

N/A

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force										Date: March 2024			
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10					P-1 Line Item Number / Title: SPCMOD / Space Mods					Modification Number / Title: 1 / PARCS Block 02			
ID Code (A=Service Ready, B=Not Service Ready) : A							MDAP/MAIS Code:						
Models of Systems Affected: NA				Modification Type: Reliability & Maintainability				Related RDT&E PEs:					
Financial Plan	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	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 2: COMMON: Install Kits (2)</i>													
A Kits													
Recurring													
COMMON: Install Kits:INSTALL KITS Group A (Active)	- / -	- / 0.100	- / 0.100	- / 0.100	- / -	- / 0.100	- / 0.100	- / 0.100	- / 0.100	- / 0.100	- / -	- / 0.700	
<i>Subtotal: Recurring</i>	- / -	- / 0.100	- / 0.100	- / 0.100	- / -	- / 0.100	- / 0.100	- / 0.100	- / 0.100	- / 0.100	- / -	- / 0.700	
<i>Subtotal: COMMON: Install Kits (2)</i>	- / -	- / 0.100	- / 0.100	- / 0.100	- / -	- / 0.100	- / 0.100	- / 0.100	- / 0.100	- / 0.100	- / -	- / 0.700	
<i>Modification Item 2 of 2: PARCS: EQUIPMENT (2)</i>													
B Kits													
Recurring													
PARCS: EQUIPMENT:EQUIPMENT Group B (Active)	- / -	1 / 2.895	1 / 3.866	1 / 5.226	- / -	1 / 5.226	1 / 4.692	1 / 4.815	1 / 4.913	1 / 4.940	- / -	7 / 31.347	
<i>Subtotal: Recurring</i>	- / -	- / 2.895	- / 3.866	- / 5.226	- / -	- / 5.226	- / 4.692	- / 4.815	- / 4.913	- / 4.940	- / -	- / 31.347	
<i>Subtotal: PARCS: EQUIPMENT (2)</i>	- / -	- / 2.895	- / 3.866	- / 5.226	- / -	- / 5.226	- / 4.692	- / 4.815	- / 4.913	- / 4.940	- / -	- / 31.347	
<i>Subtotal: Procurement, All Modification Items</i>	- / -	- / 2.995	- / 3.966	- / 5.326	- / -	- / 5.326	- / 4.792	- / 4.915	- / 5.013	- / 5.040	- / -	- / 32.047	
Support (All Modification Items)													
A&AS	- / 1.106	- / 1.000	- / 2.500	- / 0.500	- / -	- / 0.500	- / 0.550	- / 0.525	- / 0.500	- / 0.500	- / -	- / 17.181	
OTHER GOVT	- / -	- / -	- / -	- / 0.500	- / -	- / 0.500	- / 0.450	- / 0.475	- / 0.500	- / 0.500	- / -	- / 12.425	
<i>Subtotal: Support</i>	- / 1.106	- / 1.000	- / 2.500	- / 1.000	- / -	- / 1.000	- / 1.000	- / 1.000	- / 1.000	- / 1.000	- / -	- / 19.606	
Installation													
<i>Subtotal: Installation</i>	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	1.106	3.995	6.466	6.326	0.000	6.326	5.792	5.915	6.013	6.040	-	41.653	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force						Date: March 2024	
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10			P-1 Line Item Number / Title: SPCMOD / Space Mods			Modification Number / Title: 1 / PARCS Block 02	
ID Code (A=Service Ready, B=Not Service Ready) : A					MDAP/MAIS Code:		
Modification Item 1 of 2: COMMON: Install Kits (2)							
Manufacturer Information							
Manufacturer Name: N/A				Manufacturer Location: N/A			
Administrative Leadtime (in Months):				Production Leadtime (in Months):			
Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Organic): Org/Intermediate						Installation Quantity: 0	

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2025 Air Force						Date: March 2024	
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10			P-1 Line Item Number / Title: SPCMOD / Space Mods			Modification Number / Title: 1 / PARCS Block 02	
ID Code (A=Service Ready, B=Not Service Ready) : A					MDAP/MAIS Code:		
Modification Item 2 of 2: PARCS: EQUIPMENT (2)							
Manufacturer Information							
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime (in Months): 3				Production Leadtime (in Months): 15			
Dates	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Contract Dates	Mar 2024	Jun 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028	Mar 2029
Delivery Dates	Jun 2025	Sep 2025	Jun 2026	Jun 2027	Jun 2028	Jun 2029	Jun 2030
Installation Information							
Method of Implementation (Organic): Org/Intermediate					Installation Quantity: 7		

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** SPCMOD / Space Mods **Aggregated Items Title:** Space Situational Awareness Operations

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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																				
IGS	A		-	-	-	0.496	2	0.992	0.456	1	0.456	0.483	1	0.483	-	-	-	0.483	1	0.483
SEON	A		-	-	-	-	-	-	0.599	1	0.599	0.599	1	0.599	-	-	-	0.599	1	0.599
TAPOUT	A		-	-	-	1.036	8	8.288	-	-	-	-	-	-	-	-	-	-	-	-
SPARES-TAPOUT	A		-	-	-	-	-	-	0.003	16	0.054	-	-	-	-	-	-	-	-	-
Subtotal: Hardware-Hardware End Item Cost			-	-	-	-	-	9.280	-	-	1.109	-	-	1.082	-	-	-	-	-	1.082
Support-Support End Item Cost																				
INSTALLATION-IGS	A		-	-	-	4.307	1	4.307	2.180	1	2.180	2.006	1	2.006	-	-	-	2.006	1	2.006
SHIPPING-TAPOUT	A		-	-	-	0.031	8	0.248	0.025	16	0.408	-	-	-	-	-	-	-	-	-
SITE CONSTRUCTION-TAPOUT	A		-	-	-	-	-	-	0.030	16	0.477	-	-	-	-	-	-	-	-	-
LEASING EXPENSES-TAPOUT	A		-	-	-	-	-	-	0.070	16	1.126	-	-	-	-	-	-	-	-	-
Subtotal: Support-Support End Item Cost			-	-	-	-	-	4.555	-	-	4.191	-	-	2.006	-	-	-	-	-	2.006
Total			-	-	-	-	-	13.835	-	-	5.300	-	-	3.088	-	-	-	-	-	3.088

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 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** SPCMOD / Space Mods **Aggregated Items Title:** Weather Service

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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																				
MARK IV-B	A		-	-	-	1.218	1	1.218	0.306	1	0.306	0.160	2	0.320	-	-	-	0.160	2	0.320
Subtotal: Hardware-Hardware End Item Cost			-	-	-	-	-	1.218	-	-	0.306	-	-	0.320	-	-	-	-	-	0.320
Support-Support End Item Cost																				
Installation MARK IV-B	A		-	-	-	-	-	-	0.234	2	0.468	0.237	2	0.475	-	-	-	0.238	2	0.475
Subtotal: Support-Support End Item Cost			-	-	-	-	-	-	-	-	0.468	-	-	0.475	-	-	-	-	-	0.475
Total			-	-	-	-	-	1.218	-	-	0.774	-	-	0.795	-	-	-	-	-	0.795

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

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs	P-1 Line Item Number / Title: SPRNGE / Spacelift Range System Space
--	---

ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203182SF	Other Related Program Elements: 1203182SF
--	---	--

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	24.916	69.275	114.505	63.798	-	63.798	62.448	64.027	65.190	66.251	-	530.410
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	24.916	69.275	114.505	63.798	-	63.798	62.448	64.027	65.190	66.251	-	530.410
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	24.916	69.275	114.505	63.798	-	63.798	62.448	64.027	65.190	66.251	-	530.410

(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. LTRS operates at the Eastern Range (ER) at Patrick SFB/Cape Canaveral SFS, FL and the Western Range (WR) at Vandenberg SFB, CA. LTRS 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, as well as aeronautical and guided weapon tests. LTRS ensures ability to meet the national launch requirement, safely support the launch cadence of ER/WR launch requirement holders and provide assured access to space for the nation. The ER and WR are designated as Department of Defense Major Range and Test Facility Bases (MRTFB). LTRS is comprised of 12 subsystems that together provide this capability to the ranges. The Range Safety, Command Destruct, and Positive Control 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) 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 Space Force prioritizes procurement funds to transform LTRS to industry commercial standard technology and practices and ensure aging range equipment is modernized or replaced to meet current and projected mission requirements derived from documented Range user needs. Sustainment trends are continuously analyzed and assessed across all 12 subsystems and procurement funds are used to modernize the most critical mission equipment and procure replacement components. The LTRS program adopted a Digital Transformation approach to move components of subsystems out of sustainment into current state of practice and develop new capabilities required for modern Spaceport needs with increasingly digital infrastructure, data capabilities, and efficiencies harnessed through emerging technological advancements. The shift from the LTRS program into the Spaceports of the Future (SOTF) will be accomplished over the coming years through capability transformation.

- 1) LTRS Replenishment Spares Procurement: Provides peculiar and common support material, required re-procurement data, and interim supply support management.

- 2) LTRS Support Services: FFRDC mission assurance activities 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) LTRS Commodities Procurement: LTRS commodities procurement will meet Space Force Commander's Spaceport of the Future (SOTF) direction, formerly known as Range of the Future (ROTF), to:
 - (1) ensure LTRS meets increasing launch capacity demand on the ER and WR; and
 - (2) provide user support to launch and test requirement holders. The Commander's intent is that LTRS capability will not constrain the national space launch cadence. The Space Force will use various contract vehicles to procure, configure, install and integrate SOTF system architecture modifications to support requirements. Each Spaceport will be able to support two (threshold) and three (objective) major operations concurrently by 1 Oct 2025 (objective) but not later than 1 Oct 2028 (threshold) and achieve vehicle performance

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPRNGE / Spacelift Range System Space
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203182SF	Other Related Program Elements: 1203182SF
Line Item MDAP/MAIS Code: N/A		
<p>assessment rates of up to 30 megabytes (Mb) per second. These modifications will include advanced data reception, transport, and processing capability and modernized telemetry formats leveraging dispersed and disaggregated deployment concepts.</p> <p>4) Range Communications Facility (RCF): Relocate communications capabilities from the Eastern Range XY building to a new RCF, resolving building degradation, code non-compliance, and high risk off-loading. The Space Force will either move existing equipment or procure new COTS equipment if necessary, to meet system requirements and minimize impacts to scheduled launches.</p> <p>5) Range Command Destruct Modernization (RCDM): Modernizes the Eastern 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 the Eastern Range. 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.</p> <p>6) Modernization of Eastern Range Network (MEN): 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, 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>7) Western Range Modernization of Network (WMN): Upgrades the communications subsystem on Western Range from Asynchronous Transfer Mode (ATM) technology to an IPv6 based/IPv4 compatible network, resolving obsolescence issues, numerous high-priority sustainment issues, and providing improved cyber security for range operations. The WMN contract was awarded as a small business set aside.</p> <p>8) Digital Transformation (previously: Digital Edge Modernization (DEM)): Transforms Eastern Range (ER) and Western Range (WR) Launch and Test Range System (LTRS) sensors and systems providing data, video, and communications to conduct data-driven command and control (C2) of launch operations in pursuit of SOTF goals. The information-intensive transformation from siloed LTRS systems to an interconnected ecosystem integrating information, applications, and sensors will provide on-demand, automated and scalable data and operational services to meet continuously evolving government and industry launch and test requirements. Digital transformation will enable a commercial standard LTRS ecosystem, leveraging enterprise cloud services and modern software development strategies to deliver resilient capability at speed while flexibly integrating launch operations data and applications across the 12 LTRS subsystems. Digital Transformation will adapt LTRS to accommodate flexible, responsive, and affordable launch, recovery, and test and evaluation operations allowing scalability for accelerating launch capacity and cadence.</p> <p>SOTF Projects will enable responsive and resilient LTRS operations following full Autonomous Flight Safety System (AFSS) implementation on ER and WR. LTRS must support non-AFSS equipped Major Range and Test Facility Base (MRTFB) activities through 2030. The SOTF Strategic Guidance states the AFSS system will enable launches in one hour or less by 1 October 2025 (objective) but not later than 1 October 2028 (threshold).</p> <p>In order to meet evolving technological requirements and Spaceport of the Future guidance, LTRS will rebalance funding from a predominantly Procurement focused appropriation to a balanced appropriation mix of Procurement and RDT&E funding through a Zero Baseline Transfer FY 2025 and beyond. This realignment of appropriations ensures requirements expend against the appropriation most suited for the type of development work required for mission fulfillment. No requirements planned for Procurement obligations will be sacrificed to achieve this shift in funding profile, but a large subset of these requirements to modernize Range Instrumentation and associated services will move to the software acquisition pathway effort as core capabilities.</p> <p>Funding for this exhibit is contained in PE 1203182SF.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs

P-1 Line Item Number / Title:
SPRNGE / Spacelift Range System Space

ID Code (A=Service Ready, B=Not Service Ready): **Program Elements for Code B Items:** 1203182SF **Other Related Program Elements:** 1203182SF

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Space Lift Range System Modernization		A		- / -	- / 59.130	- / 106.382	- / 63.798	- / -	- / 63.798
P-40a	Space Lift Range System Modifications				- / 24.916	- / 10.145	- / 8.123	- / 0.000	- / 0.000	- / 0.000
P-40	Total Gross/Weapon System Cost				- / 24.916	- / 69.275	- / 114.505	- / 63.798	- / -	- / 63.798

Exhibits Schedule					FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	Space Lift Range System Modernization		A		- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Space Lift Range System Modifications				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 43.184
P-40	Total Gross/Weapon System Cost				- / 62.448	- / 64.027	- / 65.190	- / 66.251	- / -	- / 530.410

*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:
 LTRS Commodities Procurement (P-5): FY 2025 funds will accelerate system modernization and integration of prime mission equipment into the LTRS baseline delivering on Spaceport of the Future (SOTF), formerly known as Range of the Future (ROTF), launch capacity and data collection requirements. Additionally, commodity procurement modernization efforts include: telemetry upgrades, radar modernization, data processing capabilities, and LTRS Range Asset/Range Item Development Integration into the Range of FY 2024-delivered modernized end items.

LTRS Interim Supply Support (P-5): FY 2025 funds will continue to provide LTRS supply support to include spares, spares management support, and management support in preparation of delivering SOTF modernized systems and executing Digital Transformation.

LTRS Support Services (P-5): FY 2025 funds will continue FFRDC mission assurance and procurement and research and development to ensure LTRS remains technically compatible with launch mission assurance and mission safety. Funds will continue SE&I and program management supporting LTRS system engineering baseline currency throughout modernization and Digital Transformation program acquisition and research and development activities.

Digital Transformation (previously Digital Edge Modernization (DEM)): FY 2025 funds will procure Next Gen Radar Open System Architecture (ROSA) Integration (19.134) ROSA III Operational Segment Integration; 0.134 Radar Control Segment ROSA II Upgrade, and Phase 3 Modernization of WR Operations (MOWRO) including deployment of increased voice and video data capacity. Additional Procurement funding will advance the goals of Digital Transformation under SOTF strategic intent.

RCDM (P-40a): No FY 2025 funding requested. RCDM completed in Oct 22 and transitioned to sustainment.

WMN (P-40a): No FY 2025 funding requested. WMN will complete in Dec 23 and transition to sustainment.

RCF (P-3a): No FY 2025 funding requested. RCF will complete in Dec 23 and transition to sustainment.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 01: Space Procurement, SF / BSA 10: Space Programs		P-1 Line Item Number / Title: SPRNGE / Spacelift Range System Space
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: 1203182SF	Other Related Program Elements: 1203182SF

Line Item MDAP/MAIS Code: N/A

Additionally, FY 2025 funding will allow the program to rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities include, but are not limited to, program office support, studies, technical analysis, etc.

Efforts with funding starting in FY 2026 through FY 2029 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 2026 Cost Delta: 62.448 million
- (b) FY 2027 Cost Delta: 64.027 million
- (c) FY 2028 Cost Delta: 65.190 million
- (d) FY 2029 Cost Delta: 66.251 million
- (e) FY Total Cost Delta: 487.226 million

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10	P-1 Line Item Number / Title: SPRNGE / Spacelift Range System Space	Item Number / Title [DODIC]: Space Lift Range System Modernization
--	---	--

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	59.130	106.382	63.798	-	63.798
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	59.130	106.382	63.798	-	63.798
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	59.130	106.382	63.798	-	63.798

(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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 - Spacelift Range System Space Cost																		
Non Recurring Cost																		
Commodities Procurement	-	-	-	-	-	21.305	-	-	67.374	-	-	30.623	-	-	-	-	-	30.623
<i>Subtotal: Non Recurring Cost</i>	-	-	-	-	-	21.305	-	-	67.374	-	-	30.623	-	-	-	-	-	30.623
<i>Subtotal: Hardware - Spacelift Range System Space Cost</i>	-	-	-	-	-	21.305	-	-	67.374	-	-	30.623	-	-	-	-	-	30.623
Logistics - Spacelift Range System Space Cost																		
Recurring Cost																		
Interim Supply Support Material (Parts/Supplies)	-	-	-	-	-	6.898	-	-	7.451	-	-	8.047	-	-	-	-	-	8.047
Technical Mission Analysis	-	-	-	-	-	4.342	-	-	4.473	-	-	4.607	-	-	-	-	-	4.607
Enterprise Systems Engineering and Integration	-	-	-	-	-	15.800	-	-	15.900	-	-	10.321	-	-	-	-	-	10.321
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	27.040	-	-	27.824	-	-	22.975	-	-	-	-	-	22.975
<i>Subtotal: Logistics - Spacelift Range System Space Cost</i>	-	-	-	-	-	27.040	-	-	27.824	-	-	22.975	-	-	-	-	-	22.975
Support - Spacelift Range System Space Cost																		
FFRDC	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-
Advisory and Assistance Services (A&AS)	-	-	-	-	-	6.600	-	-	6.554	-	-	6.693	-	-	-	-	-	6.693

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2025 Air Force												Date: March 2024					
Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10						P-1 Line Item Number / Title: SPRNGE / Spacelift Range System Space						Item Number / Title [DODIC]: Space Lift Range System Modernization					
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 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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 Support	-	-	-	-	-	4.185	-	-	4.630	-	-	3.507	-	-	-	-	-	3.507
<i>Subtotal: Support - Spacelift Range System Space Cost</i>	-	-	-	-	-	10.785	-	-	11.184	-	-	10.200	-	-	-	-	-	10.200
Gross/Weapon System Cost	-	-	-	-	-	59.130	-	-	106.382	-	-	63.798	-	-	-	-	-	63.798

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.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Modification Items: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F / 01 / 10 **P-1 Line Item Number / Title:** SPRNGE / Spacelift Range System Space **Aggregated Modification Items Title:** Space Lift Range System Modifications

Item Number / Title	ID CD	MDAP/MAIS Code	Prior Years			FY 2023			FY 2024			FY 2025 Base			FY 2025 OCO			FY 2025 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-RCF / Range Communications Facility (RCF)			-	-	14.687	-	-	8.400	-	-	8.100	-	-	-	-	-	-	-	-	
02-WMN / Western Range Modernization of Network (WMN)			-	-	5.390	-	-	1.745	-	-	0.023	-	-	-	-	-	-	-	-	
03-RCDM / Range Command Destruct Modernization (RCDM)			-	-	4.839	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	24.916	-	-	10.145	-	-	8.123	-	-	0.000	-	-	0.000	-	-	0.000

Item Number / Title	ID CD	MDAP/MAIS Code	FY 2026			FY 2027			FY 2028			FY 2029			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-RCF / Range Communications Facility (RCF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.187	
02-WMN / Western Range Modernization of Network (WMN)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.158	
03-RCDM / Range Command Destruct Modernization (RCDM)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.839	
Total			-	-	0.000	-	-	43.184												

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
01-RCF / Range Communications Facility (RCF)	RCF	Reliability & Maintainability
02-WMN / Western Range Modernization of Network (WMN)	WMN	Capability Improvement
03-RCDM / Range Command Destruct Modernization (RCDM)	RCDM	Capability Improvement

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 02: Spares / BSA 20: Spares **P-1 Line Item Number / Title:** SSPARE / 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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	1.352	0.906	0.722	-	0.722	0.941	0.967	0.988	1.008	0.000	6.884
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	1.352	0.906	0.722	-	0.722	0.941	0.967	0.988	1.008	0.000	6.884
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	1.352	0.906	0.722	-	0.722	0.941	0.967	0.988	1.008	0.000	6.884

(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, sub-assemblies, and consumable items required as initial stock (including readiness spares package requirements) in support of space acquisition programs. 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 program:
Information Systems Security Program

Justification:

Justification:
The FY25 budget supports initial spares for the following program: Information Systems Security Program.

PE 1203140SF Information Systems Security Program: FY25 funding (\$0.722M) is required to supply crypto devices for space and ground nodes, used by all Services/Agencies, to meet NSA cybersecurity mandates.

The FY 2025 funding request was reduced by \$0.20 million to account for the availability of prior year execution balances.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity:
3022F: Procurement, Space Force / BA 03: Ground Vehicular Equipment / BSA 31: Passenger Carrying Vehicles

P-1 Line Item Number / Title:
SFV000 / USSF Replacement Vehicles

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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	0.000	0.000	4.919	-	4.919	5.017	5.114	5.218	5.323	-	25.591
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	0.000	0.000	4.919	-	4.919	5.017	5.114	5.218	5.323	-	25.591
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	0.000	0.000	4.919	-	4.919	5.017	5.114	5.218	5.323	-	25.591

(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:

USSF Replacement Vehicles includes a combination of Base maintenance Support Vehicles, Runway Snow Removal and Cleaning, Medium Tactical Vehicles, Special Purpose Vehicles, Cargo and Utility Vehicles, Material Handling Vehicles, Passenger Carrying Vehicles, and Joint Light Tactical Vehicles. These vehicles are general in nature, but they fulfill unique and distinct needs commensurate with their design. These vehicles are used to support a variety of functions and missions at all levels of the Space Force. US Space for System Sustainment Command (SSC) and Space Operations Command (SpOC) have mission units and Deltas at CONUS and OCONUS locations conducting space operations that enhance the way our joint and coalition forces fight and offer decision makers military options to achieve national objectives. These vehicles also support Space Training and Readiness Command (STARCOM) training units, protocol offices, and several other missions. Base maintenance and support vehicles allow for the safe handling and movement of critical cargo and equipment during performance of maintenance activities. Runway removal and cleaning vehicles allow for the restoration of runway operations in the event of inclement weather and/or runway obstructions. Medium and light tactical vehicles are used to perform Space Force base security operations. Special purpose vehicles are used for unique requirements for base operations. Material handling vehicles allow for the safe and secure transportation of supplies and equipment. Passenger carrying vehicles are used to transport students and passengers in support of training requirements.

This requirement [or modification] supports performance of a full financial audit as required by title 10 U.S.C. Chapter 9A, Sec 240-D.

In FY 2025 USSF Replacement Vehicles is a New Start.

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: 0702831SF.

Justification:

FY 2025 procurement dollars in the amount of \$4.919M will procure, but not be limited to vehicles in support of installation and unit mission requirements for United States Space Force personnel.

Quantities are based on current requirements provided by the 441 Vehicle Support Chain Operations Squadron (VSCOS) IAW the process outlined in AFI 24-302, Vehicle Management. The requirements are generated from the priority buy model that is used to support the Planning, Programming, Budgeting and Execution (PPBE) process. The model calculates vehicle requirements by fund year by project using

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force		Date: March 2024
Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 03: Ground Vehicular Equipment / BSA 31: Passenger Carrying Vehicles		P-1 Line Item Number / Title: SFV000 / USSF Replacement Vehicles
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		
<p>end of life projections based on depreciation and service life of the vehicle, cumulative sustainment cost and mission priority. As the model applies the life expectancy/sustainment cost/mission priority logic in generating requirements, there can be gaps in individual vehicle type (NSN) requirements from year-to-year. Unit Cost is subject to change from year-to-year based on buy quantities, CONUS/OCONUS locations, inflation, and additional requirements (options required by users). Unit cost is also subject to change based on fluctuations in contract pricing.</p> <p>In FY 2025 USSF Replacement Vehicles is a New Start.</p> <p>Funding for this exhibit is contained in PE 0702831SF. Funding in Prior Years was contained in BLI 821800 (Passenger Carrying Vehicles) in the 3080 Other Procurement, Air Force account. In FY 2025, Space Force replacement vehicle funding was transferred to the 3022 Procurement, Space Force account.</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2025 Air Force **Date:** March 2024

Appropriation / Budget Activity / Budget Sub Activity: 3022F: Procurement, Space Force / BA 04: Other Base Maintenance and Support Equipment / BSA 41: Support Equipment	P-1 Line Item Number / Title: POWCON / Power Conditioning 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

Resource Summary	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	0.000	3.100	3.189	-	3.189	3.276	3.364	3.434	3.503	-	19.866
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	0.000	3.100	3.189	-	3.189	3.276	3.364	3.434	3.503	-	19.866
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	0.000	3.100	3.189	-	3.189	3.276	3.364	3.434	3.503	-	19.866

(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 Power Conditioning and Continuation Interfacing Equipment (PCCIE) program provides centralized point for technical/engineering support, acquisition, fielding and sustainment of PCCIE systems. The Uninterruptible Power Supply (UPS) systems protect sensitive electronic equipment/systems such as command and control centers, intelligence missions, radars, etc. 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.

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 is contained in PE 0207510SF

Justification:

Provides technical/engineering support, acquisition, fielding and sustainment of PCCIE systems.

To guarantee continuation of operations in the event of power surges or failures PCCIE is the last line of defense for critical intelligence, satellite, radar, airfield and computer systems

FY 2025 funds 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.

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED