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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force **Date:** March 2023

Appropriation/Budget Activity 3620F: Research, Development, Test & Evaluation, Space Force I BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 1203001SF I Family of Advanced BLoS Terminals (FAB-T)
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	151.967	128.243	91.369	0.000	91.369	2.603	0.306	0.312	0.005	0.000	374.805
672490: Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)	-	13.817	2.850	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.667
673035: Presidential and National Voice Conferencing	-	51.492	34.972	35.319	0.000	35.319	2.000	0.306	0.312	0.005	0.000	124.406
673040: Force Element Terminal	-	86.658	90.421	56.050	0.000	56.050	0.603	0.000	0.000	0.000	0.000	233.732

A. Mission Description and Budget Item Justification

The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) - Command Post Terminal (CPT), Force Element Terminal (FET), and Presidential and National Voice Conferencing (PNVC) Integrator programs - transitioned from AFPEO/SP to AFPEO/NC3 effective December 2018.

The FAB-T CPT project replaces legacy Milstar terminals and will provide Extremely High Frequency (EHF) protected high data rate communication for nuclear and conventional forces to include PNVC. FAB-T 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 and Advanced EHF (AEHF) satellites. FAB-T CPTs will also support the critical command and control (C2) of the Milstar and AEHF satellite constellations.

The Family of Advanced Beyond Line-of-Sight Terminals Force Element Terminal (FAB-T 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). FAB-T FET was designated as a Middle Tier of Acquisition (MTA) in February 2019.

The total cost of the FAB-T FET Middle Tier of Acquisition effort is \$454.2 million. The program is fully funded across the Future Years Defense Program. FAB-T FET is planned to transition to the Major Capability Acquisition (MCA) Pathway at Milestone C in FY2024.

The PNVC Integrator project is a critical element of the Nuclear Command, Control, and Communications (NC3) System. PNVC is the Survivable Emergency Conferencing Network (SECN) replacement capability, which provides anti-jam, anti-scintillation, survivable, and enduring voice communications through the AEHF satellite system for national and strategic users. There are several components being developed and procured by other organizations that must be synchronized to expeditiously field the capability. The PNVC Integrator is responsible for end-to-end integration of these components, to include requirements traceability, end-to-end system testing, configuration and checkout activities, training and technical manuals, network transition support, identification of deficiencies in overall PNVC system

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
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Appropriation/Budget Activity 3620F: <i>Research, Development, Test & Evaluation, Space Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 1203001SF / <i>Family of Advanced BLoS Terminals (FAB-T)</i>
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capability, enterprise, and life cycle support for PNVC components. The AFPEO/SP approved entry into the acquisition lifecycle as a post MS-A Acquisition Category (ACAT) III Program of Record in January 2016. Starting in December 2018, PNVC Integrator became responsible for the funding requests of all program elements related to the Defense Information Systems and Agency (DISA) components of the PNVC System in accordance with FY 2018 National Defense Authorization Act, Sec. 1661. In March 2019, the AFPEO/NC3 declared the PNVC Integrator an ACAT II Program based on the inclusion of DISA funding in the program budget.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY 0.735M was expended for civilian pay expenses in this program element, and in CY 0.752M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	156.788	128.243	80.750	0.000	80.750
Current President's Budget	151.967	128.243	91.369	0.000	91.369
Total Adjustments	-4.821	0.000	10.619	0.000	10.619
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-4.821	0.000			
• Other Adjustments	0.000	0.000	10.619	0.000	10.619

Change Summary Explanation

FY 2022 (\$4.821M) for SBIR reduction

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force **Date:** March 2023

Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)	Project (Number/Name) 672490 / Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
672490: Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)	-	13.817	2.850	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.667
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The FAB-T Command Post Terminal (CPT) project 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 and Advanced EHF (AEHF) satellites. FAB-T CPTs will also support the critical command and control (C2) of the Milstar and AEHF satellite constellations. The Department of the Air Force (DAF) will continue development of the FAB-T CPT, performing systems engineering, architecture studies, development and operational test efforts, terminal interoperability with the full AEHF satellite constellation activities, and other program activities to meet current and future emerging SATCOM requirements.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2022	FY 2023	FY 2024
Title: FAB-T CPT Development	13.817	2.850	0.000
Description: The FAB-T CPT program will provide EHF voice and data Military Satellite Communication (MILSATCOM) for nuclear and conventional forces as well as airborne and ground command posts with connectivity to Milstar and AEHF satellites.			
FY 2023 Plans: The FAB-T CPT program continues to provide EHF voice and data MILSATCOM for nuclear and conventional forces as well as airborne and ground command posts with connectivity to Milstar and AEHF satellites. FAB-T CPT development efforts are required for NSA AEHF terminal certification.			
Activities may include, but are not limited to program office support, studies, technical analysis, experimentation, prototyping, etc.			
Activities funded in this program continue to pay for AN/USQ-225 integration into multiple legacy systems, other ongoing NC3 acquisition programs, and future capabilities for the overall AF NC3 WS.			
FY 2024 Plans: The FAB-T CPT program continues to provide EHF voice and data MILSATCOM for nuclear and conventional forces as well as airborne and ground command posts with connectivity to Milstar and AEHF satellites. FAB-T CPT is scheduled to complete development of efforts required for NSA AEHF terminal certification, specifically an update to the software encryption station.			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)	Project (Number/Name) 672490 / Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Activities may include, but are not limited to program office support, studies, technical analysis, experimentation, prototyping, etc.			
FY 2023 to FY 2024 Increase/Decrease Statement: Project extended into FY 2024 using funding within the program element as required for completion.			
Accomplishments/Planned Programs Subtotals	13.817	2.850	0.000

C. Other Program Funding Summary (\$ in Millions)											
			FY 2024	FY 2024	FY 2024						Cost To
Line Item	FY 2022	FY 2023	Base	OCO	Total	FY 2025	FY 2026	FY 2027	FY 2028	Complete	Total Cost
• SPSF 01 FBLOST FAB-T: FAB-T	30.745	13.078	21.749	-	21.749	15.563	14.402	5.055	5.161	Continuing	Continuing
• SPSF 01 FBLOST PNVC: FAB-T	5.799	3.066	3.308	-	3.308	1.672	1.708	1.754	0.000	Continuing	Continuing
• SPSF 01 SPAF FET: FAB-T	0.000	0.000	121.634	-	121.634	234.255	212.400	23.447	23.939	Continuing	Continuing
• RDTE 07 FET: FAB-T	86.658	90.421	56.050	-	56.050	0.603	0.000	0.000	0.000	0.000	233.732
• RDTE 07 PNVC: FAB-T	51.492	34.972	35.319	-	35.319	2.000	0.306	0.312	0.005	Continuing	Continuing

Remarks

D. Acquisition Strategy
 FAB-T CPT Acquisition Strategy: In FY 2012, the government restructured the FAB-T CPT development program to introduce competition into the acquisition strategy in order to reduce risk in delivering this capability as well as to drive down production costs. To ensure the best value to the government, the DAF awarded production contracts in September 2013 to both contractors (Boeing and Raytheon). The production contracts began with production planning for both contractors. In June 2014, the DAF down-selected to Raytheon. Development and production of FAB-T CPTs continued with Raytheon. The first Production contract options to produce FAB-T CPTs were exercised after a successful Milestone C decision was approved September 1, 2015.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force **Date:** March 2023

Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)	Project (Number/Name) 672490 / Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)
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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FAB-T CPT Prime Contract	Various	Raytheon : Marlboro, MA	-	12.862	Nov 2021	1.996	Dec 2022	-		-		-	Continuing	Continuing	-
FAB-T CPT Technical Mission Analysis	Various	Various : Various	-	0.397	Dec 2021	0.390	Dec 2022	-		-		-	Continuing	Continuing	-
Subtotal			-	13.259		2.386		-		-		-	Continuing	Continuing	N/A

Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FAB-T CPT Other Support	Various	Various : Various	-	0.142	Oct 2021	0.064	Nov 2022	-		-		-	Continuing	Continuing	-
FAB-T CPT A&AS	Various	Various : Various	-	0.416	Feb 2022	0.400	Jan 2023	-		-		-	Continuing	Continuing	-
Subtotal			-	0.558		0.464		-		-		-	Continuing	Continuing	N/A

			Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	13.817	2.850	-	-	-	Continuing	Continuing	N/A

Remarks
 Prior Years funding, FY 2016/FY 2017 \$95.229M was executed in Program Element (PE) 0303001F. Prior to FY 2016, \$180.602M was executed in PE 0303601F.

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)	Project (Number/Name) 672490 / Family of Advanced Beyond Line- of-Sight Terminals (FAB-T)

FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

FAB-T	
FAB-T CPT AEHF Terminal Certification	

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / <i>Family of Advanced BLoS Terminals (FAB-T)</i>	Project (Number/Name) 672490 / <i>Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>FAB-T</i>				
FAB-T CPT AEHF Terminal Certification	1	2022	4	2024

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force										Date: March 2023		
Appropriation/Budget Activity 3620F / 7					R-1 Program Element (Number/Name) PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)				Project (Number/Name) 673035 / Presidential and National Voice Conferencing			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
673035: Presidential and National Voice Conferencing	-	51.492	34.972	35.319	0.000	35.319	2.000	0.306	0.312	0.005	0.000	124.406
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The PNVC project is a critical element of the Nuclear Command, Control, and Communications (NC3) System. PNVC is the Survivable Emergency Conferencing Network (SECN) replacement capability which provides anti-jam, anti-scintillation, survivable, and endurable voice communications through the Advanced Extremely High Frequency (AEHF) satellite system for national and strategic users. There are several components being developed, procured and updated by other organizations that must be synchronized to expeditiously field this capability. The PNVC Integrator is responsible for end-to-end integration of these components, to include requirements traceability, end-to-end system testing, configuration and checkout activities, training and technical manuals, network transition support, identification of deficiencies in overall PNVC system capability, enterprise, and life cycle support for PNVC components. The AFPEO/SP approved entry into the acquisition life-cycle as a post MS-A Acquisition Category (ACAT) III Program of Record in January 2016. In March 2019 the AFPEO/NC3 declared the PNVC Integrator an ACAT II Program based on updated approved budget request.

Starting in December 2018 PNVC Integrator became responsible for the funding requests of all program elements related to the Defense Information Systems and Agency (DISA) components of the PNVC System in accordance with FY 2018 National Defense Authorization Act, Sec. 1661. In October 2021, PNVC completed Milestone B/C.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2022	FY 2023	FY 2024
Title: PNVC Integrator	51.492	34.972	35.319
Description: PNVC is the SECN replacement capability which provides anti-jam, anti-scintillation, survivable, and endurable voice communications through the AEHF satellite system for national and strategic users. The PNVC capability consists of constituent programs being developed and produced by other organizations. This program will integrate, test, and support configuration of hardware from these other programs. PNVC components will be installed at ground fixed and mobile command locations as well as three aircraft platforms.			
FY 2023 Plans: PNVC Integrator undergoes Multi-Service Operational Test and Evaluation (MOT&E), led by the Air Force Operational Test and Evaluation Center (AFOTEC), and overseen by the Director, Operational Test & Evaluation (DOT&E). This end-to-end system test assesses all node types in the PNVC system in its operational environment to determine PNVC's overall capability to support mission accomplishment, as determined by effectiveness, suitability, and other applicable operational considerations such as survivability.			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / <i>Family of Advanced BLoS Terminals (FAB-T)</i>	Project (Number/Name) 673035 / <i>Presidential and National Voice Conferencing</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<p>PNVC Integrator also conducts integration and checkout activities and training at remaining operational sites world-wide, conducts cyber-security testing, and continues to work closely with the applicable sustainment organizations, as they make their preparations for becoming responsible for PNVC sustainment, engineering, and maintenance.</p> <p>PNVC Integrator activities include, but are not limited, to program office support, prototyping, test planning and execution, deficiency resolution, logistics and sustainment support planning, component product support, risk reduction activities, technical analysis and studies, platform integration and support, and integration of laboratory support.</p> <p>Activities funded in this program continue to pay for AN/USQ-225 integration into multiple legacy systems, other ongoing NC3 acquisition programs, and future capabilities for the overall AF NC3 WS.</p> <p>FY 2024 Plans: The PNVC Integrator will continue to conduct integration and checkout activities and training at remaining operational sites world-wide, conduct cyber-security testing, and continue to work closely with the applicable sustainment organizations, as they make their preparations for becoming responsible for PNVC sustainment, engineering, and maintenance.</p> <p>PNVC Integrator activities will include, but are not limited, to program office support, prototyping, test planning and execution, deficiency resolution, logistics and sustainment support planning, component product support, risk reduction activities, technical analysis and studies, platform integration and support, and integration of laboratory support. PNVC will continue to support component fielding, conduct site integration and checkout, finish integrated developmental activities and prepare for initial operational capability.</p> <p>Activities funded in this program continue to pay for AN/USQ-225 integration into multiple legacy systems, other ongoing NC3 acquisition programs, and future capabilities for the overall AF NC3 WS.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Level of program activity is relatively consistent from FY 2023 to FY 2024. Testing will be concluded in FY 2023 and deficiencies will be corrected, however the 7th Node will require integration activities into FY 2024.</p>			
Accomplishments/Planned Programs Subtotals	51.492	34.972	35.319

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)	Project (Number/Name) 673035 / Presidential and National Voice Conferencing

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2022	FY 2023	FY 2024	FY 2024	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cost To	
			Base	OCO	Total					Complete	Total Cost
• SPSF 01 FBLOST FAB-T: FAB-T	30.745	13.078	21.749	-	21.749	15.563	14.402	5.055	5.161	Continuing	Continuing
• SPSF 01 FBLOST PNVC: FAB-T	5.799	3.066	3.308	-	3.308	1.672	1.708	1.754	0.000	Continuing	Continuing
• SPSF 01 SPAF FET: FAB-T	0.000	0.000	121.634	-	121.634	234.255	212.400	23.447	23.939	Continuing	Continuing
• RDTE 07 FET: FAB-T	86.658	90.421	56.050	-	56.050	0.603	0.000	0.000	0.000	0.000	233.732
• RDTE 07 FAB-T CPT: FAB-T	13.817	2.850	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	16.667

Remarks

D. Acquisition Strategy

PNVC Acquisition Strategy: On May 15, 2015 the Deputy Secretary of Defense assigned the PNVC End-to-End Integration responsibility to the DAF; effective May 16, 2015, SAF/AQ designated the AFPEO/SP. In March 2019 the AFPEO/NC3 declared the PNVC Integrator an ACAT II Program based on updated approved budget request. The PNVC End-to-End Integrator program is responsible for requirements traceability, End-to-End system testing, site configuration activities, training and technical manuals, network transition support, identifying deficiencies in the PNVC capability, and enterprise and life cycle support for all PNVC components. Starting in December 2018 PNVC Integration is responsible for all program elements' requests for funding related to the Defense Information Systems and Agency (DISA) components of the PNVC System in accordance with FY 2018 National Defense Authorization Act, Sec. 1661.

PNVC will continue to support component fielding, conduct site integration and checkout, and prepare for and execute integrated developmental test activities in advance of the PNVC system Initial Operating Capability.

Beginning in FY2020, all PNVC funds were transferred from DISA to Project 673035, for execution.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force												Date: March 2023				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)						Project (Number/Name)						
3620F / 7				PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)						673035 / Presidential and National Voice Conferencing						
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
PNVC Prime Contract	Various	Raytheon : Largo, FL	-	36.980	Oct 2021	20.672	Oct 2022	22.569	Oct 2023	-		22.569	Continuing	Continuing	-	
PNVC Technical Mission Analysis	Various	Various : Various	-	3.089	Oct 2021	3.075	Oct 2022	3.000	Oct 2023	-		3.000	Continuing	Continuing	-	
PNVC Enterprise SE&I	Various	Various : Various	-	3.305	Oct 2021	3.205	Oct 2022	3.100	Oct 2023	-		3.100	Continuing	Continuing	-	
Subtotal			-	43.374		26.952		28.669		-		28.669	Continuing	Continuing	N/A	
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
PNVC Government Test and LDTO Support	Various	Various : Various	-	0.687	Oct 2021	0.605	Oct 2022	0.500	Oct 2023	-		0.500	Continuing	Continuing	-	
Subtotal			-	0.687		0.605		0.500		-		0.500	Continuing	Continuing	N/A	
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
PNVC FFRDC	Various	Various : Various	-	3.680	Oct 2021	3.675	Nov 2022	2.900	Nov 2023	-		2.900	Continuing	Continuing	-	
PNVC A&AS	Various	Various : Various	-	2.162	Nov 2021	2.160	Nov 2022	2.000	Nov 2023	-		2.000	Continuing	Continuing	-	
PNVC Other Support	Various	Various : Various	-	1.589	Oct 2021	1.580	Nov 2022	1.250	Nov 2023	-		1.250	Continuing	Continuing	-	
Subtotal			-	7.431		7.415		6.150		-		6.150	Continuing	Continuing	N/A	
Project Cost Totals			-	51.492		34.972		35.319		-		35.319	Continuing	Continuing	N/A	
Remarks																

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / <i>Family of Advanced BLoS Terminals (FAB-T)</i>	Project (Number/Name) 673035 / <i>Presidential and National Voice Conferencing</i>

FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

<i>PNVC Integrator</i>	
Phase II Dry-Runs & Development Test 2	
Multi-Service Operational Test & Evaluation	
Training/Installation and Checkout	
Software Maturation	

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / <i>Family of Advanced BLoS Terminals (FAB-T)</i>	Project (Number/Name) 673035 / <i>Presidential and National Voice Conferencing</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>PNVC Integrator</i>				
Phase II Dry-Runs & Development Test 2	1	2022	1	2022
Multi-Service Operational Test & Evaluation	2	2023	1	2024
Training/Installation and Checkout	1	2022	1	2028
Software Maturation	1	2022	4	2024

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force **Date:** March 2023

Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)	Project (Number/Name) 673040 / Force Element Terminal
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
673040: Force Element Terminal	-	86.658	90.421	56.050	0.000	56.050	0.603	0.000	0.000	0.000	0.000	233.732
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The Family of Advanced Beyond Line-of-Sight Terminals Force Element Terminal (FAB-T FET) program replaces the Ultra High Frequency (UHF) Milstar terminal 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. FAB-T FET was designated as a Middle Tier of Acquisition (MTA) in February 2019.

The total cost of the FAB-T FET Middle Tier of Acquisition effort is \$454.2 million. The program is fully funded across the Future Years Defense Program. FAB-T FET activities are expected to be designated as Major Capability Acquisition at Milestone C in FY2024.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2022	FY 2023	FY 2024
Title: FAB-T FET	86.658	90.421	56.050
Description: Continue development of FETs. Development activities include, but are not limited to, FAB-T FET design, development, and qualification testing.			
FY 2023 Plans: Funding is for the continued development of Force Element Terminals. FAB-T FET integration and testing activities include reliability growth testing and fabrication of test assets. Prototypes will support terminal environmental and functional testing to include flight testing, and early integration efforts.			
Planning and support activities include continued qualification test planning, logistics support planning, risk reduction activities for development and follow-on production, technical analysis and studies, platform integration support, program office support, and mitigations for Diminishing Manufacturing Sources and Material Shortages in preparation for terminal production decision.			
Activities funded in this program continue to pay for AN/USQ-225 integration into multiple legacy systems, other ongoing NC3 acquisition programs, and future capabilities for the overall AF NC3 WS.			
FY 2024 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force		Date: March 2023
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Funding is for the continued development of FETs. FAB-T FET integration and testing activities will include reliability growth testing and fabrication of test assets; prototype and test terminals will support terminal security, environmental, and functional testing, to include flight testing, and early integration efforts.			
Planning and support activities will continue, including qualification test planning, logistics support planning, risk reduction activities for development and follow-on production, technical analysis and studies, platform integration support, program office support, and mitigations for Diminishing Manufacturing Sources and Material Shortages in preparation for terminal production.			
Activities funded in this program continue to pay for AN/USQ-225 integration into multiple legacy systems, other ongoing NC3 acquisition programs, and future capabilities for the overall AF NC3 WS.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding decrease is based upon the planned reduction of the initial prototype configuration material purchases, integration, and testing FET continues the development, material purchasing, integration, and test of the test asset configuration.			
Accomplishments/Planned Programs Subtotals	86.658	90.421	56.050

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• SPSF 01 FBLOST FAB-T: FAB-T	30.745	13.078	21.749	-	21.749	15.563	14.402	5.055	5.161	Continuing	Continuing
• SPSF 01 FBLOST PNVC: FAB-T	5.799	3.066	3.308	-	3.308	1.672	1.708	1.754	0.000	Continuing	Continuing
• SPSF 01 SPAF FET: FAB-T	0.000	0.000	121.634	-	121.634	234.255	212.400	23.447	23.939	Continuing	Continuing
• RDTE 07 PNVC: FAB-T	51.492	34.972	35.319	-	35.319	2.000	0.306	0.312	0.005	Continuing	Continuing
• RDTE 07 FAB-T CPT: FAB-T	13.817	2.850	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	16.667

Remarks

D. Acquisition Strategy
 FAB-T FET Acquisition Strategy: Per the Acquisition Strategy Panel briefed to SAF/AQ on February 7, 2019, FAB-T FET pursued a Rapid Prototyping development Middle Tier Acquisition approach of the National Defense Authorization Act for FY 2016. This Rapid Prototyping program enabled FAB-T FET to accelerate the nominal program development timeline in support of the accelerated USSTRATCOM-requested Initial Operating Capability. FAB-T FET awarded a development effort on January 16, 2020 to develop, build, and test prototypes and test terminals. This Rapid Prototyping effort enabled FAB-T FET to develop, install, and obtain test data from early B-52 FAB-T FET prototypes which will also have residual operations capability. The overall development effort includes system design and build of sufficient test assets to allow for expeditious development, testing, qualification and integration support of the FAB-T FET capability. FAB-T FET will meet B-52 platform requirements to support USSTRATCOM's Strategic Nuclear Command Control and Communication (NC3) mission. On January 4, 2023, SAF/SQ approved the FAB-T FET Milestone

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Air Force		Date: March 2023
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C Acquisition Strategy which establishes the plan for the program to transition to the Major Capability Acquisition Pathway at Milestone C. Additionally, the program will begin Low-Rate Initial Production at Milestone C.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force												Date: March 2023			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)						
3620F / 7				PE 1203001SF / Family of Advanced BLoS Terminals (FAB-T)					673040 / Force Element Terminal						
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
FAB-T FET Development Contracts	Various	Raytheon : Marlborough, MA	-	61.392	Nov 2021	66.507	Dec 2022	38.199	Dec 2023	-		38.199	Continuing	Continuing	-
FAB-T FET Technical Mission Analysis	Various	Various : Various	-	1.625	Nov 2021	1.615	Dec 2022	1.000	Dec 2023	-		1.000	Continuing	Continuing	-
FAB-T FET Enterprise SE&I	Various	Various : Various	-	0.200	Mar 2022	0.150	Mar 2023	0.100	Mar 2024	-		0.100	Continuing	Continuing	-
Subtotal			-	63.217		68.272		39.299		-		39.299	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
FAB-T FET Test & Evaluation and Assets	Various	Various : Various	-	6.882	Nov 2021	6.800	Dec 2022	6.500	Dec 2023	-		6.500	Continuing	Continuing	-
Subtotal			-	6.882		6.800		6.500		-		6.500	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
FAB-T FET FFRDC	Various	Various : Various	-	6.005	Nov 2021	6.000	Dec 2022	4.250	Dec 2023	-		4.250	Continuing	Continuing	-
FAB-T FET Other Support	Various	Various : Various	-	7.324	Nov 2021	6.199	Dec 2022	3.501	Dec 2023	-		3.501	Continuing	Continuing	-
FAB-T FET A&AS	Various	Various : Various	-	3.230	Dec 2021	3.150	Jan 2023	2.500	Jan 2024	-		2.500	Continuing	Continuing	-
Subtotal			-	16.559		15.349		10.251		-		10.251	Continuing	Continuing	N/A
Project Cost Totals			-	86.658		90.421		56.050		-		56.050	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force		Date: March 2023
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FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

FET	
FAB-T FET Development	[REDACTED]
FAB-T Force Element Terminal System Design	[REDACTED]
FAB-T FET Prototype and Test Asset Testing	[REDACTED]
FAB-T Force Element Terminal Production	[REDACTED]

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3620F / 7	R-1 Program Element (Number/Name) PE 1203001SF / <i>Family of Advanced BLoS Terminals (FAB-T)</i>	Project (Number/Name) 673040 / <i>Force Element Terminal</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
FET				
FAB-T FET Development	1	2022	1	2026
FAB-T Force Element Terminal System Design	1	2022	4	2022
FAB-T FET Prototype and Test Asset Testing	2	2022	1	2026
FAB-T Force Element Terminal Production	1	2024	4	2028