

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2025 Air Force **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>
--	--

COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	0.000	71.339	33.237	62.550	0.000	62.550	24.436	20.830	16.194	9.343	Continuing	Continuing
672983: <i>MM Ground and Comm Equipment</i>	0.000	6.548	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.548
672984: <i>MM III Baseline Support</i>	0.000	51.750	33.237	50.017	0.000	50.017	24.436	20.830	16.194	9.343	Continuing	Continuing
672985: <i>MM Support Equip</i>	0.000	13.041	0.000	12.533	0.000	12.533	0.000	0.000	0.000	0.000	0.000	25.574

**Note**

This program, BA 7, PE 0101213F, project 672984, Little Mountain Test Facility (LMTF), is a new start.  
 This program, BA 7, PE 0101213F, project 672984, Stage 1 Battery Replacement (SOBR), is a new start.  
 This program, BA 7, PE 0101213F, project 672984, LGM-30G Depot Reentry Support Equipment Replacement Program (DRSERP), is a new start.  
 This program, BA 7, PE 0101213F, project 672985, LGM-30G MM III Missile Transporter Acquisitions Program (MTAP), is a new start.

**A. Mission Description and Budget Item Justification**

The MM Ground and Comm Equipment program replaces obsolete/unsupportable ground-based weapon system equipment located at Launch Control Centers (LCCs) and Launch Facilities (LFs) necessary to continue Minuteman III (MM III) operations until replaced by Sentinel. Current efforts include development, qualification, integration, and testing of replacement equipment for the LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R).

MM III Baseline Support program replaces or upgrades obsolete/unsupportable flight test unique equipment installed on the missile during flight test, used to test MM III systems on the ground, or located at test facilities to collect, process, and analyze test data. Flight test equipment supports test and evaluation of MM III capabilities, and MM III Operational Test Launches (OTLs) to determine ICBM force readiness, reliability and capability shortfalls. Efforts include development, qualification, integration and testing of replacement equipment such as LGM-30G Flight Test Telemetry and Termination System (FT3) and LGM-30G Higher Authority Command Test System (HACTS) 2.0 and LGM-30G Stage 1 Battery (SOBR) and LGM-30G Depot Reentry Support Equipment Replacement Program (DRSERP) and Little Mountain Test Facility (LMTF). These programs will also implement processes, procedures and data systems to mitigate the transition risk from MM III to Sentinel. As other similar equipment is identified for replacement, it will be added to this program. MM III Baseline Support also provides for other MM III unique government costs, studies of system performance, contract closeout costs, cost trades and acquisition planning activities, up to and including proposal preparation, for future capabilities. Efforts also include any minor needs required to prepare for full acquisition purposes.

MM Support Equipment program designs, develops, and tests replacement of obsolete/non-serviceable weapon system support equipment. These programs will also implement processes, procedures and data systems to mitigate the transition risk from MM III to Sentinel. Efforts include design, development, and testing of support equipment such as MM III Acquisition of Transportation and Handling and Support Equipment (MATH) effort as well Missile Transport Acquisitions Program (MTAP). Programs will execute Diminishing Manufacturing Sources and Material Shortages/Program Management Administration support through the ISC 2.0 contract established to support the ICBM enterprise through the life of MM III.

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2025 Air Force **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>
--	--

MM Crypto Mods executes United States Strategic Command, Air Force Global Strike Command, and Air Force Safety Center requirements by implementing the KS-60 capabilities in LGM-30G ICBM (Intercontinental Ballistic Missile (ICBM) Cryptography Upgrade II (ICU II) of remote key/code change and irreversible transformation as mandated in the approved Capabilities Development Document (dated 4 Jan 05) and addresses Nuclear Weapon System Safety Group Operational Safety Review requirements 98-2, 00-1, and 02-2. It also incorporates continuous signal lockout capabilities to prevent the widespread loss of status monitoring. These features will greatly increase security during code changes by reducing the frequency of open sites by 75 days annually and will reduce associated resource costs for 450 LFs and 45 LCCs.

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 FY2023 \$0.502M was expended for civilian pay expenses in this program element, and in FY 2024 \$0.000M 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>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Previous President's Budget	73.650	33.237	3.133	0.000	3.133
Current President's Budget	71.339	33.237	62.550	0.000	62.550
Total Adjustments	-2.311	0.000	59.417	0.000	59.417
• 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	-2.311	0.000			
• Other Adjustments	0.000	0.000	59.417	0.000	59.417

**Change Summary Explanation**

FY 2023 adjustment of -\$2.311M for Small Business Innovative Research (SBIR)

FY 2025 \$59.417M increase due to close out activities for FT3, Baseline Support activities, and new starts: SOBR, DRSERP, and LMTF.

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>				<b>Project (Number/Name)</b> 672983 / <i>MM Ground and Comm Equipment</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
672983: <i>MM Ground and Comm Equipment</i>	0.000	6.548	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.548
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The MM Ground and Comm Equipment program replaces obsolete/unsupportable ground-based weapon system equipment located at Launch Control Centers (LCCs) and Launch Facilities (LFs) necessary to continue Minuteman III operations until replaced by Sentinel. Current efforts include development, qualification, integration, and testing of replacement equipment such as the LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R).

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.

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

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R)	6.548	0.000	0.000
<b>Description:</b> The FRBP ESS-R provides security functions for the Personnel Access System (PAS) of the LFs. It is a 14,000 pound cylinder with 12 locking pins used to deny/delay access to intruders during LF maintenance activities.			
This effort includes critical hardware modifications to address high obsolescence risk and reliability issues affecting the operational wings.			
<b>FY 2024 Plans:</b> No FY24 funding			
<b>FY 2025 Plans:</b> No FY25 funding			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Not Applicable			
<b>Accomplishments/Planned Programs Subtotals</b>	6.548	0.000	0.000

**UNCLASSIFIED**

**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Air Force **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672983 / <i>MM Ground and Comm Equipment</i>
--	--	--

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• MPAF 03 Line Item	9.224	11.637	12.818	-	12.818	8.734	0.000	0.000	-	0.000	42.413
M30MLG: <i>MM III Modifications</i>											
• MPAF 04 Line Item 00098A: <i>Msl Sprs / Repair Parts (Initial)</i>	0.778	0.000	0.000	-	0.000	0.000	0.000	0.000	-	0.000	0.778

**Remarks**

**D. Acquisition Strategy**

Ground and communication equipment replacement efforts are reviewed to determine the best method for execution; including vendor qualification and procurement with no development required; develop and/or modify organic depot capabilities with industry. Industry development for ground and communication equipment efforts will be executed through contracts under the Future Intercontinental Ballistic Missile (ICBM) Sustainment and Acquisition Construct (FISAC) or competitive source selections. Nuclear Surety Cross Check Analysis (NSCCA) and Independent Verification and Validation (IV&V) efforts are contracted separately. Nuclear Surety and Vulnerability analysis requirements are covered in the Acquisition Strategy.

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / Minuteman Squadrons	<b>Project (Number/Name)</b> 672983 / MM Ground and Comm Equipment
--	---	---

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R) EMD SIBR	C/CPAF	Select Engineering Serv : Layton, UT	0.000	4.489	Oct 2022	-		-		-		-	Continuing	Continuing	-
LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R) EMD	C/CPFF	Northrop Grumman : Salt Lake City, UT	0.000	-		-		-		-		-	Continuing	Continuing	21.949
<b>Subtotal</b>			0.000	4.489		-		-		-		-	Continuing	Continuing	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R) Test & Evaluation	Various	Various : Various	0.000	0.198	Oct 2022	-		-		-		-	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	0.198		-		-		-		-	Continuing	Continuing	N/A

<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R) A&AS	C/FP	BAE : Layton, UT	0.000	1.162	Oct 2022	-		-		-		-	Continuing	Continuing	3.692
LGM-30G Fast Rising B-Plug Energy Storage System-Replacement (FRBP ESS-R) PSC	Various	Various : Various	0.000	0.699	Jan 2023	-		-		-		-	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	1.861		-		-		-		-	Continuing	Continuing	N/A





**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672983 / <i>MM Ground and Comm Equipment</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>MM Ground and Comm Equipment</i></b>				
FRBP ESS-R Engineering & Manufacturing Development Phase	1	2023	1	2025
FRBP ESS-R Milestone C (Jun 2024)	3	2024	3	2024
FRBP ESS-R Production & Deployment Phase	3	2024	3	2027
FRBP ESS-R Full Operational Capability (FOC) (April 2027)	3	2027	3	2027

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>				<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
672984: <i>MM III Baseline Support</i>	0.000	51.750	33.237	50.017	0.000	50.017	24.436	20.830	16.194	9.343	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

This program, BA 7, PE 0101213F, project 672984, Little Mountain Test Facility (LMTF), is a new start.  
 This program, BA 7, PE 0101213F, project 672984, Stage 1 Battery Replacement (SOBR), is a new start.  
 This program, BA 7, PE 0101213F, project 672984, LGM-30G Depot Reentry Support Equipment Replacement Program (DRSERP), is a new start.  
 Project 672984, LGM-30G Arm/Disarm Switch Replacement (ADSR), is expected to complete EMD by 3QFY23.

**A. Mission Description and Budget Item Justification**

Minuteman III (MM III) Baseline Support program replaces or upgrades obsolete/unsupportable flight test unique equipment installed on the missile during flight test, used to test MM III systems on the ground, or located at test facilities to collect, process, and analyze test data. Flight test equipment supports test and evaluation of MM III capabilities, and MM III Operational Test Launches (OTLs) to determine ICBM force readiness, reliability and capability shortfalls. Efforts include development, qualification, integration and testing of replacement equipment such as LGM-30G Flight Test Telemetry and Termination System (FT3); LGM-30G Higher Authority Command Test System (HACTS) 2.0 and LGM-30G Depot Reentry Support Equipment Replacement Program (DRSERP). As other similar equipment is identified for replacement, it will be added to this program. MM III Baseline Support also provides for other MM III unique government costs, studies of system performance, contract closeout costs, cost trades and acquisition planning activities, up to and including proposal preparation, for future capabilities.

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 FY 2023 \$0.502M was expended for civilian pay expenses in this program element, and in FY 2024 \$0.000M is forecasted for civilian pay expenses in this program element.

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

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> Little Mountain Test Facility (LMTF)	-	0.000	5.800
<b>Description:</b> To fund test activities, equipment development, integration, and purchases along with associated indirect costs in support of the Air Force Nuclear Weapons Center (AFNWC) portfolio, Department of Defense (DoD) and Department of Energy (DOE) programs, and other partners. The LMTF requires test capability modernization and updates to meet increasing nuclear hardness test customer needs. Equipment is outdated and has exceeded useful life. Growing nuclear enterprise requirements are driving required updates to test capabilities such as restoration and expanded infrastructure and prompt gamma testing equipment development and procurement. LMTF requires test capability modernization to ensure test capabilities and facilities meet sustainment, modernization, and mission requirements.			

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p>Execute a 3-year bridge contract award with two follow-on option years with LMTF prime contractor (Boeing) for test, operations, sustainment, equipment development, procurement, and integration.</p> <p><b>FY 2024 Plans:</b> No FY24 funding.</p> <p><b>FY 2025 Plans:</b> Continue to execute contract award with LMTF prime contractor for test, operations, sustainment, equipment development, procurement. Prime will work with subcontractors to award development, purchase, test, and implementation of ARES test equipment. Initial long lead equipment purchases will be scheduled.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> This is an FY25 new start.</p>				
<p><b>Title:</b> Stage 1 Battery Replacement (SOBR)</p> <p><b>Description:</b> The current Stage 1 (SE-13G) battery has exceeded its projected shelf life and recent aging surveillance testing shows adverse impacts to reliability and availability. As a result, the batteries are not expected to last for the extended MM III lifespan. This program plans to replace the aging silver zinc Stage 1 battery by utilizing newer technologies to develop and produce a thermal battery replacement to extend the MM III lifespan through the transition period to Sentinel.</p> <p><b>FY 2024 Plans:</b> No FY24 funding</p> <p><b>FY 2025 Plans:</b> - Milestone B completion - Contract award for development of new battery - Take 3 contractors to PDR and CDR</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> This is an FY25 New Start</p>		-	0.000	4.671
<p><b>Title:</b> LGM-30G Flight Test Telemetry and Termination System (FT3)</p> <p><b>Description:</b> The FT3 Program replaces the Mod 7 Instrumentation Wafer and associated Signal Conditioner Monitor Group, and All Ordnance Destruct System (AODS) with a flight test kit. In addition, a replacement of the Launch Support System (LSS) is required to deploy the flight test kit. The flight test kit consists of the Flight Destruct System (FDS) and an Integrated Instrumentation System (IIS). In addition, replacement of the IIS is necessary to meet Space Launch Delta 30th Space Wing Range Safety and Air Force Global Strike Command (AFGSC) requirements and resolve obsolescence concerns/issues.</p>		33.393	26.800	3.767

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p>The AODS, Mod 7 Instrumentation Wafer, and LSS include components that are not economically available, are no longer compliant with applicable range safety requirements, or are in need of technical modernization. Replacement of the Vandenberg Space Force Base (VSFB) flight test unique equipment is necessary to sustain future AFGSC Operational Test Launches (OTL), which support US Strategic Command requirements starting in FY22. The OTLs are critical to validating the continued accuracy and reliability of the MM III weapons system until the Sentinel is fielded by providing valuable data to ensure a safe, secure, and effective nuclear deterrent. The FT3 systems will perform the same function as the existing systems with upgraded design features in order to comply with U.S. Space Force Range Safety User Requirements, Range Commander's Council (RCC) 319, Flight Termination Systems Commonality Standard, and RCC 324, Global Positioning and Inertial Measurements Range Safety Tracking Systems' commonality standard.</p> <p>In February 2020, the FT3 program began executing a rapid fielding plan to meet a requirement to be first launch ready, September 2022. A successful first flight (GT 244) occurred on 7 September 2022. Rapid Fielding execution increased concurrency of technical milestones, delaying some noncritical activities to be completed after the first flight.</p> <p><b>FY 2024 Plans:</b></p> <ul style="list-style-type: none"> <li>• Take delivery of Low Rate Initial Production (LRIP) articles 5 through 7 (of 8).</li> <li>• Support LRIP flights 4 and 5 (GT 249 and GT 250).</li> <li>• Install Launch Support System in LF-09.</li> <li>• Take delivery of the Countdown Mockup Trainer at VSFB.</li> <li>• Conduct component redesign/requalification.</li> </ul> <p><b>FY 2025 Plans:</b></p> <ul style="list-style-type: none"> <li>• Take Delivery of LRIP item 8.</li> <li>• Continue to support LRIP flights 6-8 (GT 251 - GT 253).</li> <li>• Complete remaining technical orders.</li> <li>• Complete component redesign/requalification.</li> <li>• Contract closeout.</li> </ul> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Completing redesign/requalification efforts and contract closeout activities.</p>				
<p><b>Title:</b> LGM-30G Higher Authority Command Test System (HACTS) 2.0</p> <p><b>Description:</b> The MM III HACTS 2.0 program replaces obsolete/unsupportable communication system test equipment located at test facilities. HACTS laptops are past their vendor support life and require battery replacement. Due to its battery being non-user serviceable, the need for battery factory service makes the laptop units candidates for replacement. Although the HACTS laptop</p>		9.547	0.000	0.000

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p>processor is "ruggedized", its design life is only approximately four years. The replacement must be compatible with operating system updates as mandated by the Risk Management Framework. Incorporating the Weapons System Console Equipment Simulator into the HACTS enables a single hardware platform to execute both software functions, thus reducing the number of hardware devices the Government must maintain. The EMD phase will produce two refurbished units.</p> <p><b>FY 2024 Plans:</b> Not funded in FY24.</p> <p><b>FY 2025 Plans:</b> N/A</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> N/A</p>				
<p><b>Title:</b> LGM-30G Depot Reentry Support Equipment Replacement Program (DRSERP)</p> <p><b>Description:</b> The DRSERP program ensures the sustainment of MM III through end-of-life and transition to Sentinel. The current Reentry System/Reentry Vehicle (RS/RV) depot test suite will not sustain MM III through end-of-life; several items have obsolescence issues. This program will develop and procure a replacement for the Low Frequency Instrumentation Console (LFIC), Radio Frequency Instrumentation Console (RFIC), Test Control Station (TCS) and Interface Adapter Systems (IASs) with new Test Program Sets (TPSs).</p> <p><b>FY 2024 Plans:</b> No FY24 funding</p> <p><b>FY 2025 Plans:</b></p> <ul style="list-style-type: none"> <li>• Milestone B.</li> <li>• Award Engineering and Manufacturing Development contract.</li> <li>• Hold Preliminary Design Review (PDR).</li> </ul> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> This is an FY25 new start.</p>		-	0.000	32.234
<p><b>Title:</b> LGM-30G Baseline Support</p> <p><b>Description:</b> This program provides for other MM III unique government costs, studies of system performance, contract closeout costs, cost trades, and acquisition planning activities, up to and including proposal preparation, for future capabilities.</p> <p><b>FY 2024 Plans:</b></p> <ul style="list-style-type: none"> <li>• Conduct studies of system performance.</li> </ul>		8.810	6.437	3.545

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<ul style="list-style-type: none"> <li>Conduct cost trades and acquisition planning activities, up to and including proposal preparation; technology for future capabilities.</li> </ul> <p><b>FY 2025 Plans:</b></p> <ul style="list-style-type: none"> <li>Continue to conduct studies of system performance.</li> <li>Continue to conduct cost trades and acquisition planning activities, up to and including proposal preparation, technology for future capabilities.</li> </ul> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Funding decreased due to ramp-down of program activities and EMD contract close-out actions.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>	51.750	33.237	50.017

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• MPAF 03 Line Item	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	-	0.000	0.000
M30MLG: <i>MM III Modifications</i>											
• MPAF 01 00099L: <i>Missile Replacement Eq-Ballistic</i>	0.000	0.000	4.338	-	4.338	0.000	0.000	0.000	-	0.000	4.338
• MPAF 04 000999: <i>Initial Spares/Repair Parts</i>	18.523	39.085	45.866	-	45.866	42.873	51.433	53.363	-	Continuing	Continuing
• MPAF 04 Line Item 00098A: <i>Msl Sprs/Repair Parts (Initial)</i>	0.860	0.000	0.000	-	0.000	0.000	0.000	0.000	-	0.000	0.860

**Remarks**

**D. Acquisition Strategy**

Baseline Support equipment replacement efforts are reviewed to determine the best method for execution; including vendor qualification and procurement with no development required; develop and/or modify organic depot capabilities with industry. Industry development for ground and communication equipment efforts will be executed through contracts under the Future ICBM Sustainment and Acquisition Construct (FISAC) or competitive source selections. Nuclear Surety Cross Check Analysis (NSCCA) and Independent Verification and Validation (IV&V) efforts are contracted separately. Nuclear Surety and Vulnerability analysis requirements are covered in the Acquisition Strategy.

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / Minuteman Squadrons	<b>Project (Number/Name)</b> 672984 / MM III Baseline Support
--	---	--

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
LGM-30G Arm Disarm Switch Replacement (ADSR)	C/CPFF	MOOG/ BIONETICS/ EBAD : Moorpark, CA. Blacksburg VA. Heath OH, CA	0.000	-		-		-		-		-	0.000	0.000	8.587
LGM-30G Stage 1 Battery (SOBR)	C/CPAF	Hill AFB : Clearfield, UT	0.000	-		-		3.838	Jan 2025	-		3.838	0.000	3.838	-
LGM-30G Flight Test Telemetry and Termination System (FT3) TMRR/EMD	C/CPIF	Boeing : Clearfield, UT	0.000	24.868	Dec 2022	22.202	Nov 2023	3.767	Jan 2025	-		3.767	0.000	50.837	387.071
LGM-30G Higher Authority Command Test System (HACTS) 2.0	C/CPAF	General Dynamics : Dedham, MA	0.000	9.547	Jan 2024	-		-		-		-	0.000	9.547	-
LGM-30G Depot Reentry Support Equipment Replacement Program (DRSERP) EMD	SS/CPFF	Lockheed Martin : Orlando, FL	0.000	-		-		28.805	Mar 2025	-		28.805	0.000	28.805	-
<b>Subtotal</b>			0.000	34.415		22.202		36.410		-		36.410	0.000	93.027	N/A

<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Little Mountain Test Facility (LMTF)	C/CPAF	Boeing : Clearfield, UT	0.000	-		-		0.500	Feb 2025	-		0.500	0.000	0.500	-
LGM-30G Arm Disarm Switch Replacement (ADSR) Support	C/Various	Hill AFB : Clearfield, UT	0.000	-		-		-		-		-	0.000	0.000	-
LGM-30G Arm Disarm Switch Replacement (ADSR) Civilian Pay	C/FP	Hill AFB : Clearfield, UT	0.000	-		-		-		-		-	0.000	0.000	-
LGM-30G Stage 1 Battery (SOBR)	C/FP	Hill AFB : Clearfield, UT	0.000	-		-		0.833	Jan 2025	-		0.833	0.000	0.833	-

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / Minuteman Squadrons	<b>Project (Number/Name)</b> 672984 / MM III Baseline Support
--	---	--

<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
LGM-30G Flight Test Telemetry and Termination System (FT3) Support	C/Various	Various : Clearfield, UT	0.000	3.757	Nov 2022	1.094	Mar 2024	-		-		-	0.000	4.851	-
LGM-30G Flight Test Telemetry and Termination System (FT3) Civilian Pay	C/FP	Hill AFB : Clearfield, UT	0.000	1.090	Oct 2022	1.117	Oct 2023	-		-		-	0.000	2.207	-
LGM-30G Depot Reentry Support Equipment Replacement Program (DRSERP)	SS/CPFF	Hill AFB : Clearfield, UT	0.000	-		-		2.736	Mar 2025	-		2.736	0.000	2.736	-
LGM-30G Baseline Support	C/Various	Various : Various	0.000	8.810	Mar 2023	6.437	Mar 2024	3.545	Mar 2025	-		3.545	0.000	18.792	-
<b>Subtotal</b>			0.000	13.657		8.648		7.614		-		7.614	0.000	29.919	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
Little Mountain Test Facility (LMTF)	C/CPAF	Boeing : Clearfield, UT	0.000	-		-		5.300	Feb 2025	-		5.300	0.000	5.300	-
LGM-30G Flight Test Telemetry and Termination System (FT3) Lead Developmental Test Organization	MIPR	AEDC/TST : AAFB, TN	0.000	0.099	Nov 2022	0.008	Nov 2023	-		-		-	0.000	0.107	-
<b>Subtotal</b>			0.000	0.099		0.008		5.300		-		5.300	0.000	5.407	N/A

<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
LGM-30G Arm Disarm Switch Replacement (ADSR) PSC	Various	Various : Various	0.000	-		-		-		-		-	0.000	0.000	-



**UNCLASSIFIED**

**Exhibit R-4, RDT&E Schedule Profile:** PB 2025 Air Force **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>
--	--	---

FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
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

<b>MM III Baseline Support</b>																												
ADSR Milestone C (May 2023)																												
ADSR Production and Development Phase (Nov 2024)																												
FT3 Engineering and Manufacturing Development (EMD) Phase																												
FT3 Milestone C (Apr 2023)																												
FT3 Production and Deployment (P&D) Phase																												
FT3 Operations and Support Phase																												
HACTS 2.0 Milestone B (Sep 2023)																												
HACTS 2.0 EMD Phase (May 2024)																												
HACTS 2.0 Milestone C (Jan 2026)																												
HACTS 2.0 P&D (Jan 2026)																												
HACTS 2.0 Full Operational Capability (FOC) (Aug 2026)																												
SOBR Milestone B (Feb 2025)																												
SOBR EMD Phase (Feb 2025)																												
SOBR Milestone C (July 2027)																												
SOBR Production Contract Award																												
SOBR P&D (Mar 2028)																												
SOBR FOC (Aug 2028)																												
DRSERP Milestone B (Jan 2025)																												
DRSERP EMD (Mar 2025)																												
DRSERP Milestone C (Oct 2028)																												
DRSERP P&D (Oct 2028)																												

**UNCLASSIFIED**

**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>
--	--	---

	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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

DRSERP FOC (Sep 2029)																													
LMTF Contract Award (Mar 2025)																													
LMTF Procurement Activities (Aug 2025)																													
LMTF Testing, Final Integration (Aug 2027)																													
LMTF Certification (Nov 2029)																													

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>MM III Baseline Support</i></b>				
ADSR Milestone C (May 2023)	2	2024	2	2024
ADSR Production and Development Phase (Nov 2024)	2	2024	4	2024
FT3 Engineering and Manufacturing Development (EMD) Phase	1	2023	1	2026
FT3 Milestone C (Apr 2023)	3	2023	3	2023
FT3 Production and Deployment (P&D) Phase	3	2023	4	2025
FT3 Operations and Support Phase	2	2023	4	2028
HACTS 2.0 Milestone B (Sep 2023)	4	2023	3	2024
HACTS 2.0 EMD Phase (May 2024)	3	2024	2	2026
HACTS 2.0 Milestone C (Jan 2026)	2	2026	2	2026
HACTS 2.0 P&D (Jan 2026)	2	2026	4	2026
HACTS 2.0 Full Operational Capability (FOC) (Aug 2026)	4	2026	4	2026
SOBR Milestone B (Feb 2025)	2	2025	2	2025
SOBR EMD Phase (Feb 2025)	2	2025	4	2027
SOBR Milestone C (July 2027)	4	2027	4	2027
SOBR Production Contract Award	4	2027	2	2028
SOBR P&D (Mar 2028)	2	2028	4	2028
SOBR FOC (Aug 2028)	4	2028	4	2028
DRSERP Milestone B (Jan 2025)	2	2025	3	2025
DRSERP EMD (Mar 2025)	2	2025	1	2028
DRSERP Milestone C (Oct 2028)	1	2028	4	2029
DRSERP P&D (Oct 2028)	1	2028	4	2029
DRSERP FOC (Sep 2029)	4	2029	4	2029

**UNCLASSIFIED**

**Exhibit R-4A, RDT&E Schedule Details:** PB 2025 Air Force **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672984 / <i>MM III Baseline Support</i>
--	--	---

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
LMTF Contract Award (Mar 2025)	2	2025	4	2025
LMTF Procurement Activities (Aug 2025)	4	2025	3	2028
LMTF Testing, Final Integration (Aug 2027)	4	2027	1	2029
LMTF Certification (Nov 2029)	1	2029	3	2029

**Note**

FT3 Program:

- FT3 Acquisition Strategy drives an overlap in the EMD and P&D phases. FT3 uses RDT&E to fund LRIP units. As flight test units are consumed, the program replaces those units with replenishment spares. The order of replenishment spares overlaps with EMD to deliver spares at a rate that keeps pace with consumption.
- Redesign and Requalification change order extends the period of performance through the end of 1QFY26.
- P&D Phase will end when the first full-rate production unit is delivered and P&D exit criteria are met (4QFY25).
- Operations and support phase started when FT3 systems sustainment activities began (2QFY23).
- Sustainment includes LSS and associated FT3 support equipment (APPN 3400) through the life of MM III OTL Program.
- Plan is to purchase up to 20 replenishment spares (up to 4 per year through 2030) which will support the MM III OTL mission.

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>				<b>Project (Number/Name)</b> 672985 / <i>MM Support Equip</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
672985: <i>MM Support Equip</i>	0.000	13.041	0.000	12.533	0.000	12.533	0.000	0.000	0.000	0.000	0.000	25.574
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

This program, BA 7, PE 0101213F, project 672985, LGM-30G MM III Missile Transporter Acquisitions Program (MTAP), is a new start.

**A. Mission Description and Budget Item Justification**

Minuteman (MM) Support Equipment program designs, develops, and tests replacement of obsolete/non-serviceable weapon system support equipment. These programs will also implement processes, procedures and data systems to mitigate the transition risk from MM III to Sentinel. Efforts include design, development, and testing of support equipment such as LGM-30G MM III Acquisition of Transportation & Handling and Support (MATH) Equipment effort, and Missile Transporter Acquisition Procurement (MTAP) effort.

In FY24, MATH Technical Data Package (TDP) updates (phase one) will occur in FY24. During phase one, there will be a review of the legacy Government engineering design data of each asset, specifically the Propulsion System Rocket Engine (PSRE), PSRE tractor & trailer (PST), and Rocket Motor Semi-Trailer (RMS) to determine required changes to address obsolescence issues and enable manufacturing of new assets. Phase-One includes a Preliminary Design Review (PDR) and a Critical Design Review (CDR) of the asset design for first article manufacturing.

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.

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

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> LGM-30G MM III Missile Transporter Acquisitions Program (MTAP)	-	0.000	6.266
<b>Description:</b> The MTAP effort modernizes the missile transporter (MT) fleet to address known obsolescence, update the TDP, procure new MT units, and provision spares where none exist. This modernization effort ensures that the MT fleet is poised to transport the LGM-30G downstage until the MM III weapon system reaches its projected end of life.			
<b>FY 2024 Plans:</b> No FY24 funding			
<b>FY 2025 Plans:</b> - Contract award; 1st article MT tractor and trailer. - PDR.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b>			

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672985 / <i>MM Support Equip</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
FY25 new start.			
<b>Title:</b> LGM-30G MM III Acquisition of Transportation and Handling and Support Equipment (MATH)	13.041	0.000	6.267
<b>Description:</b> The MATH program ensures the sustainment of the MM III weapons system and concurrent transition to Sentinel without any disruption to the nuclear deterrence mission. The current transport and handling (T&H) equipment will not sustain MM III through end of life. The current T&H TDP is out of date; several items have obsolescence issues. Engineering is needed to provide adequate and complete technical data to support acquisition of MM III T&H equipment. Items include the following:  a. Propulsion System Rocket Engine (PSRE) tractor and trailer (PST); b. Rocket motor semi-trailer; c. Support Equipment (SE).  MATH engineering efforts will include a Preliminary Design Review (PDR) and a Critical Design Review (CDR) to evaluate the proposed TDP and first article testing to validate the TDPs. Technical support documents will be updated as necessary.  <b>FY 2024 Plans:</b> No FY24 funding.  <b>FY 2025 Plans:</b> Award EMD Contract  <b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Requirements definitized which require additional funding.			
<b>Accomplishments/Planned Programs Subtotals</b>	13.041	0.000	12.533

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• MPAF 01 Line Item 00099L: <i>Missile Replacement Eq- Ballistic</i>	0.000	10.893	0.000	-	0.000	0.000	8.950	8.140	-	0.000	27.983

**Remarks**

**D. Acquisition Strategy**  
Support and test equipment efforts are reviewed to determine the best method for execution, including vendor qualification and procurement with no development required; develop and/or modify with organic depot capabilities, or development with industry. Industry development efforts for support equipment will be executed

**UNCLASSIFIED**

**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Air Force **Date:** March 2024

<b>Appropriation/Budget Activity</b>	<b>R-1 Program Element (Number/Name)</b>	<b>Project (Number/Name)</b>
3600 / 7	PE 0101213F / <i>Minuteman Squadrons</i>	672985 / <i>MM Support Equip</i>

through contracts available under the Future ICBM Sustainment and Acquisition Contract (FISAC) or competitive source selections. Nuclear Surety Cross Check Analysis (NSCCA) and Independent Verification and Validation (IV&V) efforts are conducted separately. Nuclear Surety and Vulnerability analysis requirements are covered in the Acquisition Strategy.

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / Minuteman Squadrons	<b>Project (Number/Name)</b> 672985 / MM Support Equip
--	---	---

<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
MM III Missile Transporter Acquisition Procurement (MTAP)	TBD	TBD : TBD	0.000	-		-		4.932	Jun 2025	-		4.932	0.000	4.932	-
MM III Transportation/ Handling MATH (PSRE Semi Trailer)	SS/CPIF	HDT : Solon	0.000	5.530	Jan 2024	-		2.070	Apr 2025	-		2.070	Continuing	Continuing	-
MM III Transportation/ Handling MATH (Rocket Motor Semitrailer)	SS/CPIF	HDT : Solon	0.000	3.389	Jan 2024	-		2.360	Apr 2025	-		2.360	Continuing	Continuing	-
MM III Transportation/ Handling and Support Equipment MATH (Support Equipment)	Various	Various : Various	0.000	2.884	Aug 2023	-		-		-		-	0.000	2.884	-
<b>Subtotal</b>			0.000	11.803		-		9.362		-		9.362	Continuing	Continuing	N/A

<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
MM III Missile Transporter Acquisition Procurement MTAP	PO	LDTO : HILL AFB	0.000	-		-		-		-		-	0.000	0.000	-
MM III Transportation/ Handling MATH	PO	LDTO : Hill AFB	0.000	0.290	Dec 2022	-		1.280	Nov 2024	-		1.280	0.000	1.570	-
<b>Subtotal</b>			0.000	0.290		-		1.280		-		1.280	0.000	1.570	N/A

<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			
MM III Missile Transporter Acquisition Procurement MTAP A&AS	C/FFP	BAE : Hill AFB	0.000	-		-		0.579	Jun 2025	-		0.579	0.000	0.579	-



**UNCLASSIFIED**

**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / Minuteman Squadrons	<b>Project (Number/Name)</b> 672985 / MM Support Equip
--	---	---

FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
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

	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
<b>MM Support Equipment</b>																												
MATH Support Equipment (SE) Middle-Tier Acquisition (MTA) Rapid Prototyping (Aug 2023)				██████████																								
MATH Milestone B (Apr 2024)					██████████																							
MATH Engineering and Manufacturing Development (EMD) Phase (Jan 2025)									██████████																			
MATH SE MTA Rapid Fielding (Jan 2025)									██████████																			
MATH Milestone C (Jan 2026)													████															
MATH Production and Deployment (P&D) Phase (Apr 2026)													████████████████████															
MATH PSRE Trailer Initial Operational Capability (IOC) (Jan 2027)																	████											
MATH PSRE Trailer Full Operational Capability (FOC) (Oct 2028)																									████			
MATH RMS Trailer IOC (Jan 2027)																	████											
MATH RMS Trailer FOC (Jan 2029)																												████
MTAP Milestone B (Jun 2025)									████																			
MTAP EMD Phase									████████████████████																			
MTAP Milestone C (Jul 2027)																	██████████											
MTAP Production Contract Award (Feb 2028)																					████							
MTAP P&D (Feb 2028)																					████████████████████							
MTAP FOC (Sept 2029)																												████

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0101213F / <i>Minuteman Squadrons</i>	<b>Project (Number/Name)</b> 672985 / <i>MM Support Equip</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>MM Support Equipment</b>				
MATH Support Equipment (SE) Middle-Tier Acquisition (MTA) Rapid Prototyping (Aug 2023)	4	2023	4	2024
MATH Milestone B (Apr 2024)	3	2024	1	2025
MATH Engineering and Manufacturing Development (EMD) Phase (Jan 2025)	2	2025	2	2026
MATH SE MTA Rapid Fielding (Jan 2025)	2	2025	2	2026
MATH Milestone C (Jan 2026)	2	2026	2	2026
MATH Production and Deployment (P&D) Phase (Apr 2026)	3	2026	2	2029
MATH PSRE Trailer Initial Operational Capability (IOC) (Jan 2027)	2	2027	2	2027
MATH PSRE Trailer Full Operational Capability (FOC) (Oct 2028)	1	2028	1	2028
MATH RMS Trailer IOC (Jan 2027)	2	2027	2	2027
MATH RMS Trailer FOC ( Jan 2029)	2	2029	2	2029
MTAP Milestone B (Jun 2025)	2	2025	2	2025
MTAP EMD Phase	2	2025	4	2027
MTAP Milestone C (Jul 2027)	4	2027	2	2028
MTAP Production Contract Award (Feb 2028)	2	2028	2	2028
MTAP P&D (Feb 2028)	2	2028	4	2029
MTAP FOC (Sept 2029)	4	2029	4	2029

**Note**

MATH Program:

- Updates made to reflect delays awarding contract. After determining the incomplete nature of the MATH TDP, the program revectorred its initial contract approach from Full & Open to GSSC 2.0 Task Order. Additionally, the team discovered all docs required for the request for proposal (RFP) needed a complete overhaul to support a stronger contract. The program's Sole Source Justification and Authorization was signed and approved by Maj Gen Newberry on 1 November 2023. A final RFP was released to the contractor in December 2023, with an expected response in February 2024. Contract award anticipated in March 2024.

**UNCLASSIFIED**

**Exhibit R-4A, RDT&E Schedule Details:** PB 2025 Air Force **Date:** March 2024

<b>Appropriation/Budget Activity</b>	<b>R-1 Program Element (Number/Name)</b>	<b>Project (Number/Name)</b>
3600 / 7	PE 0101213F / <i>Minuteman Squadrons</i>	672985 / <i>MM Support Equip</i>

MTAP Program:  
• Program re-phased due to strategy change and adding EMD phase. This strategy change delayed production, expected to begin FY28.