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

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0605230F / <i>Ground Based Strategic Deterrent</i>
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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	0.000	2,464.875	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,464.875
641025: <i>GROUND BASED STRATEGIC DETERRENT (GBSD)</i>	0.000	2,464.875	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,464.875
Quantity of RDT&E Articles	-	4	-	-	-	-	-	-	-	-	-	-

**Program MDAP/MAIS Code:** 493

**Note**

In FY 2023, Program 0605230F, Ground Based Strategic Deterrent, Project 641025, Ground Based Strategic Deterrent, efforts were transferred to Program 0605238F, Ground Based Strategic Deterrent EMD, Project 655238, Ground Based Strategic Deterrent, in order to account for program transition to System Design and Development (Budget Activity 5).

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

The Sentinel (GBSD) program has been designated as LGM-35A Sentinel. The Sentinel (GBSD) program will design, develop, produce and deploy a replacement for the current Minuteman III (MM III) Intercontinental Ballistic Missile (ICBM) weapon system in order to maintain a safe, secure, reliable, and effective nuclear deterrent. The Sentinel (GBSD) program will deliver a fully integrated weapon system beginning in Fiscal Year 2029 that will lower lifecycle costs and close key capability gaps and vulnerabilities identified in the Sentinel (GBSD) Capabilities Based Assessment, Sentinel (GBSD) Capabilities Development Document, and the Sentinel (GBSD) Analysis of Alternatives. Sentinel (GBSD) will also mitigate ground-based deterrent degradation due to MM III component age-out and attrition.

The Sentinel (GBSD) program will include prime contractor development of applicable support equipment, data, flight test hardware and infrastructure, and training systems while examining and mitigating risk during the MM III to Sentinel (GBSD) transition. The Sentinel (GBSD) program office has partnered with MM III program office to facilitate communication and integration of the weapon system recapitalization during the MM III to Sentinel (GBSD) transition. This program includes any needed nuclear surety and certification and system vulnerability assessments.

During the Engineering and Manufacturing Development (EMD) phase, the Sentinel (GBSD) program will execute 1) government system engineering, analytics, and test capability development; 2) air vehicle equipment development; 3) command & launch systems development; 4) infrastructure and deployment development; 5) support systems development; and 6) weapon system integration.

Government systems engineering investments include development in model-based systems engineering (MBSE), integration, test software, product life-cycle management framework, and modernization of existing system engineering/integration labs and infrastructure. Air vehicle equipment is an integrated missile stack including the propulsion, post-boost, guidance, and re-entry systems sub-components. Command & launch encompasses all command and control components and interfaces, associated ground hardware, ground control equipment and associated software directly related to the survivability, monitoring, and launch of the

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replacement flight system. Launch systems include launch centers, launch facilities, and associated structures and ground mechanical systems. Support systems include operator and maintainer training systems hardware and software, security system architecture, transport support equipment, program office and weapon system facilities, and peculiar/common support equipment. Weapon system integration risk reduction includes non-proprietary open systems architecture with well-defined interfaces and a modular design at the weapon system level to allow future modification and technology insertion. As Sentinel (GBSD) progresses toward Critical Design Review (CDR), the Sentinel (GBSD) weapon system design will dictate the parameters for the MILCON real property requirements and their integration with the weapon system component requirements as these are inextricably linked.

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 elements 0605833F or 0605831F. In FY 2022 17.0M was expended for civilian pay expenses in this program element, and in FY23 0.0M is forecasted for civilian pay expenses in this program element.

This effort is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P), because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
Previous President's Budget	2,553.541	0.000	0.000	0.000	0.000
Current President's Budget	2,464.875	0.000	0.000	0.000	0.000
Total Adjustments	-88.666	0.000	0.000	0.000	0.000
• 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	-88.666	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000

**Change Summary Explanation**

FY22 reduced -88.666 million for Small Business Innovative Research (SBIR)

<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
<b>Title:</b> Engineering & Manufacturing Development (EMD)	2,464.875	0.000	0.000
<b>Description:</b> The objectives of EMD for GBSD are: 1) advance GBSD major activities, systems engineering activities, information technology, data management, analytical capabilities and deliver a flexible, integrated weapon system critical design, 2) prototype			

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>
and test mature technologies related to the major activities and demonstrate performance of sub-system and system capabilities through prototyping and testing and 3) engage in rapid prototyping events to mature future design increments.			
<b>FY 2023 Plans:</b> N/A			
<b>FY 2024 Plans:</b> N/A			
<b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> N/A			
<b>Accomplishments/Planned Programs Subtotals</b>	2,464.875	0.000	0.000

<b>D. Other Program Funding Summary (\$ in Millions)</b>												
<b>Line Item</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
• RDTE 05 PE 0605238F: <i>Ground Based Strategic Deterrent EMD</i>	0.000	3,614.290	3,737.969	-	3,737.969	3,381.139	3,214.913	2,589.439	1,837.577	1,626.122	20,001.449	
• RDTE 04 PE 0603851F: <i>Intercontinental Ballistic Missile - Dem/Val</i>	73.894	46.432	45.217	-	45.217	56.424	0.000	0.000	0.000	Continuing	Continuing	
• MPAF 01 Line Item MGBSD0: <i>Ground Based Strategic Deterrent</i>	10.895	0.000	539.300	-	539.300	502.720	6,773.441	7,422.434	6,131.595	40,187.246	61,567.631	
• MILCON PE 0101233F: <i>GBSD SQUADRONS</i>	168.099	444.000	143.039	-	143.039	489.001	699.387	722.469	765.498	5,720.844	9,152.337	
• OPAF 03 WSC 834130: <i>AF Physical Security System</i>	0.000	2.839	4.160	-	4.160	5.670	0.000	0.000	0.000	0.000	12.669	

**Remarks**

**E. Acquisition Strategy**  
The objective of the Sentinel (GBSD) program acquisition strategy is to deliver a full, integrated weapon system capability that meets Air Force Global Strike Command's Capability Development Document requirements beginning in Fiscal Year 2029. For the Engineering and Manufacturing Development (EMD) phase of this strategy, the Program Office awarded an EMD contract in the 4th quarter of Fiscal Year 2020. The objectives of EMD for Sentinel (GBSD) are as follows: 1) to deliver low-risk, technologically mature, integrated weapon system baseline design; 2) develop flexible system architecture with options for future on-ramps and off-ramps to mitigate program risks; 3) embrace MBSE/digital engineering to streamline system development activities and timelines; 4) align contract incentives to mitigate schedule and

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performance risk; 5) utilize MBSE processes and tools to create schedule margin and accelerate surety, safety, cyber, and test activities for time certain delivery; 6) ensure government owns key interfaces and data rights; and 7) pursue "smart commonality" with U.S. Navy, U.S. Space Force, and Missile Defense Agency. The EMD phase includes an EMD Baseline Review, Critical Design Review, First Flight Test, Full Functional System Test, System Qualification/System Verification Review, Nuclear Certification, Developmental Test, Operational Test, and culminates with early production and weapon system deployment. The program will also assess the cost and schedule risks associated with every requirement. The EMD contract includes 5 options for early production and deployment. The period of performance, to include the production and deployment options, is fourth quarter of Fiscal Year 2020 to the second quarter of Fiscal Year 2028. These efforts will ultimately extend the capabilities of the ground-based leg of the nuclear triad through 2075.

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<b>Product Development (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
TMRR Contractor #1	C/CPFF	Boeing Def, Space, & Sec : Huntsville, AL	0.000	-		-		-		-		-	0.000	0.000	261.115
TMRR Contractor #2	C/CPFF	Northrop Grumman Sys Corp : El Segundo, CA	0.000	-		-		-		-		-	0.000	0.000	370.790
EMD Contract	C/CPFF	Northrop Grumman Sys Corp : El Segundo, CA	0.000	2,015.145	Oct 2021	-		-		-		-	0.000	2,015.145	13,293.563
Security Classification Guide Compliance	C/FFP	Lockheed Martin Corp : King of Prussia, PA	0.000	-		-		-		-		-	0.000	0.000	1.506
<b>Subtotal</b>			0.000	2,015.145		-		-		-		-	0.000	2,015.145	N/A

**Remarks**  
 EMD Contract initiated in the fourth quarter FY20 under Program 0605230F, Ground Based Strategic Deterrent; beginning in FY23, funding shifted to Program 0605238F, Ground Based Strategic Deterrent EMD. Target Value of Contract is \$13,293.563 million across both programs.  
 GBSD TMRR Contractor #1 and #2 contracts were modified to include costs for Security Classification Guide Compliance.  
 GBSD Security Classification Guide Compliance includes compliance costs for the TMRR unsuccessful offeror.

<b>Support (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Integration Support Contract	C/FFP	BAE : Hill AFB, UT	0.000	75.322	Oct 2021	-		-		-		-	0.000	75.322	519.735
Naval Surface Warfare Center Crane Support	MIPR	Naval Surface Warfare Center Crane : Crane, IN	0.000	6.594	Nov 2021	-		-		-		-	0.000	6.594	-
Aerospace FFRDC Support	MIPR	Aerospace Corporation : El Segundo, CA	0.000	21.672	Nov 2021	-		-		-		-	0.000	21.672	-
MITRE FFRDC Support	MIPR	MITRE : Bedford, MA	0.000	15.464	Nov 2021	-		-		-		-	0.000	15.464	-

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<b>Support (\$ in Millions)</b>				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			
Carnegie Mellon Software Engineering Institute Support	MIPR	Carnegie Mellon : Pittsburgh, PA	0.000	6.934	Nov 2021	-		-		-		-	0.000	6.934	-
Sandia FFRDC Reentry Systems Analysis Support	MIPR	Sandia National Laboratories : Various	0.000	1.000	Oct 2021	-		-		-		-	0.000	1.000	-
Operations Research Analyst Support	C/FFP	Tecolote Research : Hill AFB, UT	0.000	5.364	Oct 2021	-		-		-		-	0.000	5.364	35.487
MIT Lincoln Labs FFRDC Reentry Systems Analysis Support	MIPR	MIT Lincoln Labs : Lexington, MA	0.000	1.365	Oct 2021	-		-		-		-	0.000	1.365	-
Common Cryptographic Equipment	MIPR	Sandia National Labs : Various	0.000	18.320	Nov 2021	-		-		-		-	0.000	18.320	-
Nuclear Surety & Certification Support	MIPR	Various : Various	0.000	3.655	Nov 2021	-		-		-		-	0.000	3.655	-
Mantech Support	RO	Man Tech International : Herndon, VA	0.000	9.318	Dec 2021	-		-		-		-	0.000	9.318	-
NEPA Analysis Support	MIPR	Various : Various	0.000	11.944	Nov 2021	-		-		-		-	0.000	11.944	-
GBSD Direct Cite Civilian Pay	Various	US Gov Civilians : Hill AFB, UT	0.000	17.000	Oct 2021	-		-		-		-	0.000	17.000	-
Reentry Vehicle Sustainment Support	C/CPAF	Lockheed Martin Corp : Bethesda, MD	0.000	2.200	Dec 2021	-		-		-		-	0.000	2.200	-
Sandia Integration Support	MIPR	Sandia National Labs : Various	0.000	0.700	Nov 2021	-		-		-		-	0.000	0.700	-
GBSD Facility Execution Support	MIPR	Various : Various	0.000	2.727	Nov 2021	-		-		-		-	0.000	2.727	-
Space Dynamics Lab Support	C/CPFF	USU Space Dynamics Lab : Logan, UT	0.000	1.523	Nov 2021	-		-		-		-	0.000	1.523	-
Test Range Support	Various	Various : Various	0.000	1.571	Nov 2021	-		-		-		-	0.000	1.571	-
GBSD Enterprise Support	C/Various	Various : Various	0.000	1.760	Dec 2021	-		-		-		-	0.000	1.760	-

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<b>Support (\$ in Millions)</b>				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			
<b>Subtotal</b>			0.000	204.433		-		-		-		-	0.000	204.433	N/A

**Remarks**  
Integration Support Contract and Operations Research Analyst Support contracts initiated under Program 0605230F, Ground Based Strategic Deterrent; beginning in FY23, funding shifted to Program 0605238F, Ground Based Strategic Deterrent EMD. Target Value of Contract reflects value across both programs.

Additional Items:  
- Space Dynamics Lab Support  
- Test Range Support

<b>Test and Evaluation (\$ in Millions)</b>				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			
Johns Hopkins - Applied Physics Lab Support	MIPR	Johns Hopkins University-Applied Physics Lab : Laurel, MD	0.000	29.760	Oct 2021	-		-		-		-	0.000	29.760	-
Arnold Engineering Development Complex - Integrated Test Team	PO	Arnold Engineering Development Complex : Arnold AFB, TN	0.000	11.454	Oct 2021	-		-		-		-	0.000	11.454	-
Air Force Operational Test and Evaluation Center - Integrated Test Team	PO	Air Force Operational Test and Evaluation Center : Hill AFB, UT	0.000	3.700	Oct 2021	-		-		-		-	0.000	3.700	-
Missile & Intelligence Center - Integrated Threat Analysis and Simulation Environment	MIPR	DIA-Missile and Space Intelligence Center : Redstone Arsenal, AL	0.000	4.300	Nov 2021	-		-		-		-	0.000	4.300	-
National Air and Space Intelligence Center - Integrated Threat Analysis and Simulation Environment	MIPR	National Air and Space Intelligence Center : Fairborn, OH	0.000	0.000	Nov 2021	-		-		-		-	0.000	0.000	-

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<b>Test and Evaluation (\$ in Millions)</b>				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			
Nuclear Dust and Debris Environments Study	MIPR	Air Force Research Lab : Wright Patterson AFB, OH	0.000	0.000		-		-		-		-	0.000	0.000	-
30th Space Wing Base Support	Various	Various : Various	0.000	0.000		-		-		-		-	0.000	0.000	-
309th SMXG Software Engineering Support	PO	309th / 517th SWEG : Hill AFB, UT	0.000	29.606	Oct 2021	-		-		-		-	0.000	29.606	-
309th SMXG Nuclear Safety Cross Check Analysis	PO	309th / 516th SWES : Hill AFB, UT	0.000	13.211	Oct 2021	-		-		-		-	0.000	13.211	-
Guidance Instrument Life Testing	MIPR	Aerospace Corporation : El Segundo, CA	0.000	0.000	Nov 2021	-		-		-		-	0.000	0.000	-
Silo Fly-out Modeling and Simulation	MIPR	Various : Various	0.000	4.475	Nov 2021	-		-		-		-	0.000	4.475	-
Rapid Assessment Technology	MIPR	Various : Various	0.000	18.910	Mar 2022	-		-		-		-	0.000	18.910	-
Sandia Flight Test Vehicle Development	MIPR	Sandia National Labs : Various	0.000	13.902	Dec 2021	-		-		-		-	0.000	13.902	-
Lawrence Livermore Joint Environmental Test Unit	MIPR	Lawrence Livermore Labs : Livermore, CA	0.000	0.000	Dec 2021	-		-		-		-	0.000	0.000	-
Naval Surface Warfare Center Corona Support	MIPR	Naval Surface Warfare Center : Corona, CA	0.000	1.201	Dec 2021	-		-		-		-	0.000	1.201	-
Guidance Alt PIGA	MIPR	NAVY SSP : Washington Navy Yard, DC	0.000	0.000	Nov 2021	-		-		-		-	0.000	0.000	-
Combined Test Facility	MIPR	Various : Various	0.000	7.858	Dec 2021	-		-		-		-	0.000	7.858	-
RAND Study Support	MIPR	RAND Corp : Santa Monica, CA	0.000	0.000	Apr 2022	-		-		-		-	0.000	0.000	-
Broad Ocean Area Terminal Area Scoring Test Capability	MIPR	Navy Strat Sys Program : Various	0.000	5.500	Apr 2022	-		-		-		-	0.000	5.500	-

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<b>Test and Evaluation (\$ in Millions)</b>				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			
Little Mountain Test Facility Radiation Lab Upgrades	C/CPFF	The Boeing Co. : Layton, UT	0.000	1.027	Jan 2022	-		-		-		-	0.000	1.027	-
GBSD Enterprise Test and Assessments	C/Various	Various : Various	0.000	2.945	Nov 2021	-		-		-		-	0.000	2.945	-
<b>Subtotal</b>			0.000	147.849		-		-		-		-	0.000	147.849	N/A

**Remarks**  
Added Item: Little Mountain Test Facility Radiation Lab Upgrades.

<b>Management Services (\$ in Millions)</b>				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			
GBSD Administrative Support	C/FFP	Delta Solutions, Inc : Colorado Springs, CO	0.000	0.991	Jan 2022	-		-		-		-	0.000	0.991	-
GBSD Enterprise Process Improvement Support	C/FFP	Booz Allen Hamilton : McLean, VA	0.000	9.194	Nov 2021	-		-		-		-	0.000	9.194	-
Temporary Facilities and Fit-out	Various	Various : Various	0.000	13.451	Oct 2021	-		-		-		-	0.000	13.451	-
Hardware, Software, IT Resources	Various	Various : Various	0.000	23.535	Oct 2021	-		-		-		-	0.000	23.535	-
GBSD DevSecOps, Software Factory, Cloud, & Infrastructure	Various	Various : Various	0.000	44.116	Nov 2021	-		-		-		-	0.000	44.116	-
Enterprise PMA	Various	Various : Various	0.000	6.161	Oct 2021	-		-		-		-	0.000	6.161	-
<b>Subtotal</b>			0.000	97.448		-		-		-		-	0.000	97.448	N/A

**Remarks**  
Mission Defense Operations renamed to Temporary Facilities and Fit-out

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2024 Air Force</b>								<b>Date: March 2023</b>			
<b>Appropriation/Budget Activity</b> 3600 / 4				<b>R-1 Program Element (Number/Name)</b> PE 0605230F / <i>Ground Based Strategic Deterrent</i>				<b>Project (Number/Name)</b> 641025 / <i>GROUND BASED STRATEGIC DETERRENT (GBSD)</i>			
	<b>Prior Years</b>	<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	0.000	2,464.875		-		-		-	0.000	2,464.875	N/A

**Remarks**  
Starting in FY23, GBSD program funding will be reflected in Program Element 0605238F, project 655238.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Air Force</b>		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 3600 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0605230F / <i>Ground Based Strategic Deterrent</i>	<b>Project (Number/Name)</b> 641025 / <i>GROUND BASED STRATEGIC DETERRENT (GBSD)</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

<b>Ground Based Strategic Deterrent (GBSD)</b>																												
EMD Phase																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2024 Air Force		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 3600 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0605230F / <i>Ground Based Strategic Deterrent</i>	<b>Project (Number/Name)</b> 641025 / <i>GROUND BASED STRATEGIC DETERRENT (GBSD)</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Ground Based Strategic Deterrent (GBSD)</b>				
EMD Phase	1	2022	4	2022

**Note**  
 In FY 2023, Program 0605230F, Ground Based Strategic Deterrent, Project 641025, Ground Based Strategic Deterrent, efforts were transferred to Program 0605238F, Ground Based Strategic Deterrent EMD, Project 655238, Ground Based Strategic Deterrent, in order to account for program transition to System Design and Development (Budget Activity 5).