

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2025 Missile Defense Agency **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / <i>Sea Based X-Band Radar (SBX)</i>
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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	1,219.699	163.297	177.868	197.339	-	197.339	176.888	162.741	177.598	188.253	Continuing	Continuing
<i>MX46: Sea Based X-Band Radar Development Support</i>	1,174.184	157.318	171.486	189.742	-	189.742	169.413	155.971	169.614	179.468	Continuing	Continuing
<i>MD40: Program-Wide Support</i>	45.515	5.979	6.382	7.597	-	7.597	7.475	6.770	7.984	8.785	Continuing	Continuing

**Program MDAP/MAIS Code:** 362

**Note**

Increase from Fiscal Year (FY) 2024 to FY 2025 provides for five (5) year major in-port period maintenance activities and required vessel American Bureau of Shipping certification.

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

The Sea Based X-Band Radar (SBX) is an advanced X-Band Radar capable of mid-course acquisition, tracking, discrimination, and hit-assessment of missile threats. The SBX radar is mounted on a mobile, ocean-going, semi-submersible platform, enabling it to cover any region of the globe. The SBX supports the Missile Defense System Homeland Defense mission by tracking and discriminating sophisticated intercontinental ballistic missile threats.

The SBX operates at sea for Missile Defense System flight and ground test participation or in an active, operational status when indications and warnings signal the need for enhanced discrimination. The SBX is located in a Pacific port when not required at sea. The SBX maintains vessel certifications for operations at sea and software compatibility with the Missile Defense System.

**B. Program Change Summary (\$ in Millions)**

	<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	164.668	177.868	196.952	-	196.952
Current President's Budget	163.297	177.868	197.339	-	197.339
Total Adjustments	-1.371	0.000	0.387	-	0.387
• 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	0.000	0.000			
• Other Adjustment	-1.371	0.000	0.387	-	0.387

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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2025 Missile Defense Agency **Date:** March 2024

**Appropriation/Budget Activity**  
0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 4:  
*Advanced Component Development & Prototypes (ACD&P)*

**R-1 Program Element (Number/Name)**  
PE 0603907C / *Sea Based X-Band Radar (SBX)*

**Change Summary Explanation**

N/A

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Missile Defense Agency **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support
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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
<i>MX46: Sea Based X-Band Radar Development Support</i>	1,174.184	157.318	171.486	189.742	-	189.742	169.413	155.971	169.614	179.468	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

Increase from Fiscal Year (FY) 2024 to FY 2025 provides for five (5) year major in-port period maintenance activities and required vessel American Bureau of Shipping (ABS) certification.

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

This project provides developmental operations and support for the Sea Based X-Band Radar (SBX) and its three major sub-systems: the self-propelled vessel, the X-Band Radar (XBR), and the communications network. Developmental operations and support activities include operation and sustainment of the vessel, developmental operation and sustainment of the XBR, limited XBR software support, and vessel and shoreside security. The FY 2025 budget reflects the continued development required to deliver Missile Defense System enhanced discrimination capability.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2023	FY 2024	FY 2025
<p><b>Title:</b> Vessel Operations and Support</p> <p style="text-align: right;"><b>Articles:</b></p> <p><b>Description:</b> Vessel Operations and Support sustains the SBX vessel for full operations, ensures readiness for operational contingencies, and provides for resupply of SBX, underway maintenance and annual surveys at sea. The SBX participates in Missile Defense System ground and flight tests per the Integrated Master Test Plan (IMTP). This effort also provides force protection for SBX, maintenance repair, air charter transportation, and supply vessel charters.</p> <p>Specific and/or unique accomplishments to each FY are as follows:</p> <p><b>FY 2024 Plans:</b> - See above.</p> <p><b>FY 2025 Plans:</b> - See above.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> N/A</p>	<p>62.033</p> <p>-</p>	<p>68.237</p> <p>-</p>	<p>68.519</p> <p>-</p>
<b>Title:</b> XBR Operations and Support	61.439	66.518	67.215

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Missile Defense Agency		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p align="right"><i>Articles:</i></p> <p><b>Description:</b> XBR Operations and Support sustains the XBR at full operations at sea for Homeland Defense, maintaining limited software sustainment for system capability with the Missile Defense System, performing routine maintenance and testing, and fielding additional XBR capability incrementally. This effort also provides precision tracking, discrimination, and hit assessment for engagement support in Missile Defense System ground and flight tests per the approved IMTP.</p> <p>Specific and/or unique accomplishments to each FY are as follows:</p> <p><b>FY 2024 Plans:</b> - See above.</p> <p><b>FY 2025 Plans:</b> - See above.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> N/A</p>		-	-	-
<p><b>Title:</b> XBR Radome Replacement</p> <p align="right"><i>Articles:</i></p> <p><b>Description:</b> This effort funds the XBR radome replacement to remedy identified adhesion failures of the external layers and localized seam adhesion failure, including evidence of water and mold intrusion. The radome production effort is expected to complete in FY 2025, making it possible to continue SBX Homeland Defensive Operations through 2035 or longer. Installation of the radome will begin in FY 2025 and complete in early FY 2026.</p> <p><b>FY 2024 Plans:</b> - Complete fabrication of the multi-layer material, cutting into pieces and continue building up the radome envelope.</p> <p><b>FY 2025 Plans:</b> - Complete radome production and prepare for installation activities.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Decrease from FY 2024 to FY 2025 reflects the completion of the radome development and production phase, and transitioning to the installation phase.</p>		27.721 -	26.288 -	13.182 -
<p><b>Title:</b> Vessel in-Port Maintenance/Upgrades</p> <p align="right"><i>Articles:</i></p>		6.125 -	10.443 -	39.291 -

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Missile Defense Agency		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p><b>Description:</b> Perform required maintenance to achieve annual surveys of vessel power, propulsion, communications and safety equipment and U.S. Coast Guard certifications of vessel safety procedures, process controls, records and crew training/proficiency. The in-port period will conduct maintenance on major vessel components that require industrial assistance for rigging, specialized tools and skills, cleaning and repairing ballast and fuel tanks, and scaffolding for access to parts of the vessel that are hard to reach at sea and large area preservation. The work will include non-destructive testing of critical hull structure for special surveys of high-stress areas for the vessel's safe operation and to ensure SBX readiness for operational missions.</p> <p><b>FY 2024 Plans:</b> - See above.</p> <p><b>FY 2025 Plans:</b> - Complete five-year major in-port period maintenance and overhaul of critical components to meet readiness requirements and operational needs of combatant command - Complete mandatory ABS certification of the vessel to continue at-sea operations - Complete removal and replacement of thrusters and thruster variable speed drives - Complete vessel deck and column resurfacing - Complete sewage system overhaul</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Increase from FY 2024 to FY 2025 provides for major in-port maintenance preparation (e.g., purchase of repair materials, mobilization of scaffolding, office trailers for shipyard administration, purchase of consumable supplies to support industrial work), required ABS certification, and shipyard execution (e.g., labor, trucks, forklifts, cranes, workboats, air compressors, generators and ABS surveyors).</p>				
<p><b>Title:</b> XBR in-Port Maintenance/Upgrades</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Perform in-depth XBR maintenance while in-port to keep radar in optimal condition, enhancing its operational effectiveness, data accuracy, longevity, compliance, readiness, and mission success. Perform technical refresh of XBR equipment, including digital network switches, control equipment, network appliances, global positioning system, and critical cybersecurity testing and upgrades.</p> <p><b>FY 2024 Plans:</b> N/A</p> <p><b>FY 2025 Plans:</b></p>		0.000 -	0.000 -	1.535 -

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Missile Defense Agency **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
- See above.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Increase from FY 2024 to FY 2025 provides for comprehensive XBR obsolescence risk mitigation activities scheduled during significant 5-year in-port maintenance periods.			
<b>Accomplishments/Planned Programs Subtotals</b>	157.318	171.486	189.742

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

<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>
• 0603882C: Ballistic Missile Defense Midcourse Defense Segment	670.808	903.633	768.227	-	768.227	856.218	842.985	956.974	1,007.150	Continuing	Continuing
• 0603884C: Ballistic Missile Defense Sensors	228.807	239.159	209.002	-	209.002	205.087	202.555	209.816	214.110	Continuing	Continuing
• 0603891C: Special Programs - MDA	317.568	552.888	495.570	-	495.570	555.344	572.888	485.975	415.899	Continuing	Continuing
• 0603896C: Ballistic Missile Defense Command and Control, Battle Management & Communication	587.689	554.201	569.662	-	569.662	570.632	587.929	618.050	651.885	Continuing	Continuing
• 0603898C: Ballistic Missile Defense Joint Warfighter Support	50.942	48.248	47.723	-	47.723	48.921	50.062	51.376	52.565	Continuing	Continuing
• 0603904C: Missile Defense Integration and Operations Center (MDIOC)	47.629	50.549	54.525	-	54.525	56.851	58.115	59.600	61.362	Continuing	Continuing
• 0604879C: Ballistic Missile Defense Sensor Test	88.326	111.049	96.864	-	96.864	104.578	160.011	172.749	183.147	Continuing	Continuing

**Remarks**

**D. Acquisition Strategy**

The SBX is contractor-operated and maintained through various contracts between the Navy and Missile Defense Agency (MDA). SBX-1 Vessel Management, Offshore Supply Vessel, and Security contracts are managed by Military Sealift Command. The SBX radar is operated and maintained on contracts managed by MDA.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Missile Defense Agency** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support
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<b>Product Development (\$ 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>	<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>			
XBR Radome Replacement - Radome Replacement	SS/CPFF	RAYTHEON : Various	28.743	27.721	May 2023	26.288	Nov 2023	13.182	May 2025	-		13.182	0.000	95.934	0.000
<b>Subtotal</b>			28.743	27.721		26.288		13.182		-		13.182	0.000	95.934	N/A

**Remarks**  
In accordance with the Financial Management Regulation cost category definitions, some items have transferred to appropriate cost categories.

<b>Support (\$ 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>	<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>			
Vessel Operations and Support - Air Charter	MIPR	DOD - USN - MILITARY SEALIFT COMMAND (MSC) : VA	1.050	1.079	Nov 2022	1.324	Oct 2023	1.391	Oct 2024	-		1.391	Continuing	Continuing	Continuing
Vessel Operations and Support - Force Protection	MIPR	DOD - USN - MILITARY SEALIFT COMMAND (MSC) : VA	24.413	6.011	Nov 2022	6.222	Oct 2023	6.704	Oct 2024	-		6.704	Continuing	Continuing	Continuing
Vessel Operations and Support - Fuel	MIPR	DOD - USN - MILITARY SEALIFT COMMAND (MSC) : VA	94.646	12.342	Nov 2022	13.602	Oct 2023	8.202	Oct 2024	-		8.202	Continuing	Continuing	Continuing
Vessel Operations and Support - Navy Program Management Office	MIPR	DOD - USN - MILITARY SEALIFT COMMAND (MSC) : VA	17.040	4.930	Nov 2022	6.539	Oct 2023	7.065	Oct 2024	-		7.065	Continuing	Continuing	Continuing
Vessel Operations and Support - Navy Transition Office	MIPR	U.S. Navy : AL	5.732	0.000		0.000		0.000		-		0.000	0.000	5.732	0.000
Vessel Operations and Support - Operational	MIPR	DOD - USN - MILITARY SEALIFT	96.588	17.810	Nov 2022	18.457	Oct 2023	21.738	Oct 2024	-		21.738	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Missile Defense Agency												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
0400 / 4				PE 0603907C / Sea Based X-Band Radar (SBX)				MX46 / Sea Based X-Band Radar Development Support							
Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
Support Vessel (OSV Resupply)		COMMAND (MSC) : VA													
Vessel Operations and Support - SBX Operations & Support (Vessel)	MIPR	DOD - USN - MILITARY SEALIFT COMMAND (MSC) : VA	268.491	19.861	Nov 2022	22.093	Oct 2023	23.419	Oct 2024	-		23.419	Continuing	Continuing	Continuing
Vessel Operations and Support - SBX Vessel Maintenance	MIPR	Tote : HI/NJ	36.963	0.000		0.000		0.000		-		0.000	0.000	36.963	0.000
Vessel Operations and Support - Vessel Mission Integration	C/CPIF	Gryphon Tech. : AL/ HI	77.234	0.000		0.000		0.000		-		0.000	0.000	77.234	0.000
XBR Operations and Support - Civilian Salaries/ Travel	Allot	MDA : Various	4.705	2.023	Oct 2022	1.564	Oct 2023	2.014	Oct 2024	-		2.014	Continuing	Continuing	Continuing
XBR Operations and Support - Contract Support Services	C/CPFF	Various : Various	3.178	1.873	Nov 2022	0.602	Oct 2023	0.469	Oct 2024	-		0.469	Continuing	Continuing	Continuing
XBR Operations and Support - Contract Support Services - Engineering	C/CPFF	PARSONS GOVERNMENT SERVICES INC. : CA	1.444	0.732	Nov 2022	0.771	Oct 2023	0.600	Oct 2024	-		0.600	Continuing	Continuing	Continuing
XBR Operations and Support - Core Standards Implementation	MIPR	DOD - USA - COMBAT CAPABILITIES DEVELOPMENT COMMAND (CCDC) : Various	0.000	1.537	Nov 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
XBR Operations and Support - FFRDC - MIT	MIPR	MASSACHUSETTS INSTITUTE OF TECHNOLOGY : Various	0.250	0.425	May 2023	0.000		0.000		-		0.000	0.000	0.675	0.000
XBR Operations and Support - Mission Integration	C/CPIF	MANTECH : Various	18.165	7.528	Nov 2022	10.404	Nov 2023	12.412	Oct 2024	-		12.412	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Missile Defense Agency** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support
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<b>Support (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
XBR Operations and Support - Network And Infrastructure Services	C/CPAF	JACOBS TECHNOLOGY INC. : Various	2.028	0.573	Nov 2022	0.460	Jan 2024	0.474	Jan 2025	-		0.474	Continuing	Continuing	Continuing
XBR Operations and Support - SBX Communications Support	SS/CPIF	Boeing : AL/HI	23.405	0.399	Sep 2023	0.000		0.000		-		0.000	0.000	23.804	0.000
XBR Operations and Support - SBX Satellite Communications Terminal Install	MIPR	DOD - USN - NAVAL INFORMATION WARFARE CENTER (NIWC) PACIFIC : Various	3.237	0.000		0.000		0.000		-		0.000	0.000	3.237	0.000
XBR Operations and Support - X-Band Radar O&S (CLS) - DREX Switch	SS/CPFF	RAYTHEON : Various	0.000	0.000		3.000	Oct 2023	0.000		-		0.000	0.000	3.000	0.000
XBR Operations and Support - XBR Operations & Support	SS/CPFF	RAYTHEON : Various	447.281	46.349	Nov 2022	49.717	Dec 2023	51.246	Dec 2024	-		51.246	Continuing	Continuing	Continuing
Vessel in-Port Maintenance/Upgrades - Sea Based X-Band Radar Vessel Management-In-port Maintenance	MIPR	DOD - USN - MILITARY SEALIFT COMMAND (MSC) : VA	14.591	6.125	Oct 2022	10.443	Oct 2023	39.291	Oct 2024	-		39.291	Continuing	Continuing	Continuing
XBR in-Port Maintenance/Upgrades - Communication Switch Refresh	SS/CPFF	RAYTHEON : Various	5.000	0.000		0.000		1.535	Nov 2024	-		1.535	0.000	6.535	0.000
<b>Subtotal</b>			1,145.441	129.597		145.198		176.560		-		176.560	Continuing	Continuing	N/A

**Remarks**  
 Decrease from FY 2024 to FY 2025 in Vessel Operations and Support - Fuel reflects reduced fuel requirements during in-port fuel tank maintenance period.  
 Increase from FY 2024 to FY 2025 in Vessel Operations and Support Operational Support Vessel (OSV Resupply) provides for increased costs associated with support vessel for SBX resupply.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2025 Missile Defense Agency								<b>Date:</b> March 2024			
<b>Appropriation/Budget Activity</b> 0400 / 4				<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)				<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support			
	<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>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	1,174.184	157.318		171.486		189.742	-	189.742	Continuing	Continuing	N/A

**Remarks**  
Award Dates reflect date of first obligation. Additional obligations may incrementally occur throughout the year.

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**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Missile Defense Agency** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support
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	Significant Event Complete ▲		Milestone Decision Complete ★		Element Test Complete ◆		System Level Test Complete ●		Complete Activity ◆				
	Significant Event Planned △		Milestone Decision Planned ☆		Element Test Planned ◇		System Level Test Planned ○		Planned Activity ◇				
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029						
GTD-08a (N/I) (Missile Defense System Ground Test)	◆												
FTX-26 (OT) (SN, OT Target Only Flight Test)		▲											
FTX-49		▲											
FTG-12 (GM, DT/OT Intercept Flight Test)		▲											
GTI-08b (N/I)			◇										
GTI-08b Part 2			△										
In-port Maintenance			◇	◇									
GTD-08b (N/I)			◇	◇									
GTI-13 Sprint 1 (N/I) (Missile Defense System Ground Test)				◇									
GTI-13 Sprint 2 (N/I) (Missile Defense System Ground Test)					◇								
In Port Maintenance				◇	◇	◇							
GTD-13 (N/I) (Missile Defense System Ground Test)						◇							
GTI-14 Sprint 1 (N/I)							◇						
FTG-16 (GM, DT Intercept Flight Test)								△					
GTI-14 (N/I) Sprint 2 (Missile Defense System Ground Test)									◇				
FTG-17 (GM, DT/OT Intercept Flight Test)										△			
GTD-14 (N/I) (Missile Defense System Ground Test)											◇		
In port Maintenance											◇	◇	
FTG-18 (DT/OT)												△	
GTI-16 Sprint 1 (N/I)												◇	
GTI-16 Sprint 2 (N/I)													◇
FTO-04													△
GTD-16 (N/I)													◇

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Missile Defense Agency		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MX46 / Sea Based X-Band Radar Development Support

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GTD-08a (N/I) (Missile Defense System Ground Test)	1	2023	1	2023
FTX-26 (OT) (SN, OT Target Only Flight Test)	4	2023	4	2023
FTX-49	4	2023	4	2023
FTG-12 (GM, DT/OT Intercept Flight Test)	1	2024	1	2024
GTI-08b (N/I)	3	2024	3	2024
GTI-08b Part 2	3	2024	3	2024
In-port Maintenance	4	2024	1	2025
GTD-08b (N/I)	4	2024	1	2025
GTI-13 Sprint 1 (N/I) (Missile Defense System Ground Test)	2	2025	2	2025
GTI-13 Sprint 2 (N/I) (Missile Defense System Ground Test)	4	2025	4	2025
In Port Maintenance	4	2025	2	2026
GTD-13 (N/I) (Missile Defense System Ground Test)	2	2026	2	2026
GTI-14 Sprint 1 (N/I)	4	2026	4	2026
FTG-16 (GM, DT Intercept Flight Test)	2	2027	2	2027
GTI-14 (N/I) Sprint 2 (Missile Defense System Ground Test)	3	2027	3	2027
FTG-17 (GM, DT/OT Intercept Flight Test)	4	2027	4	2027
GTD-14 (N/I) ((Missile Defense System Ground Test)	4	2027	4	2027
In port Maintenance	4	2027	1	2028
FTG-18 (DT/OT)	3	2028	3	2028
GTI-16 Sprint 1 (N/I)	4	2028	4	2028
GTI-16 Sprint 2 (N/I)	3	2029	3	2029
FTO-04	3	2029	3	2029

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2025 Missile Defense Agency **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / <i>Sea Based X-Band Radar (SBX)</i>	<b>Project (Number/Name)</b> MX46 / <i>Sea Based X-Band Radar Development Support</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
GTD-16 (N/I)	4	2029	4	2029

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**Exhibit R-2A, RDT&E Project Justification:** PB 2025 Missile Defense Agency **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MD40 / Program-Wide Support
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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
MD40: Program-Wide Support	45.515	5.979	6.382	7.597	-	7.597	7.475	6.770	7.984	8.785	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

Program Wide Support (PWS) is allocated on a pro-rata basis across multiple Agency program elements (PEs) each fiscal year based on the total Agency budget, and therefore fluctuates per PE by fiscal year.

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

PWS contains non-headquarters management costs in support of MDA functions and activities across the entire Missile Defense System. These functions include Government Civilians and Contract Support Services. This effort provides integrity and oversight of the Missile Defense System as well as supports MDA in the development and evaluation of technologies that will respond to the changing threat. Additionally, PWS includes personnel to support global deployments performing deployment site preparation and activation, and provides facility capabilities for MDA Executing Agent locations worldwide. Other MDA wide costs include: physical and technical security; civilian drug testing; audit readiness; the Science, Technology, Engineering, and Mathematics (STEM) program; legal services and settlements; travel and agency training; office, equipment, vehicle, and warehouse leases; utilities and base operations across multiple geographic locations; commercial and ancillary facility services; management of all facility aspects regardless of lifecycle stage; supplies and maintenance; compliance with statutory environmental requirements; data and unified communications support; materiel and readiness and central property management of equipment; Facilities Sustainment, Restoration and Modernization (FSRM) program (formerly Real Property Maintenance) to keep the Department's inventory of facilities in good working order; and similar operating expenses. PWS is allocated on a pro-rata basis across most Agency PEs and therefore fluctuates per PE by fiscal year based on the total Agency budget in that fiscal year.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2023	FY 2024	FY 2025
<b>Title:</b> Program Wide Support	5.979	6.382	7.597
<b>Articles:</b>	-	-	-
<b>Description:</b> PWS contains non-headquarters management costs in support of MDA functions and activities across the entire Missile Defense System. These functions include Government Civilians and Contract Support Services. This effort provides integrity and oversight of the Missile Defense System as well as supports MDA in the development and evaluation of technologies that will respond to the changing threat. Additionally, PWS includes personnel to support global deployments performing deployment site preparation and activation, and provides facility capabilities for MDA Executing Agent locations worldwide. Other MDA wide costs include: physical and technical security; civilian drug testing; audit readiness; the Science, Technology, Engineering, and Mathematics (STEM) program; legal services and settlements; travel and agency training; office, equipment, vehicle, and warehouse leases; utilities and base operations across multiple geographic locations; commercial and ancillary facility services; management of all facility aspects regardless of lifecycle stage; supplies and maintenance; compliance with statutory environmental requirements; data and unified communications support; materiel and readiness and central property			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Missile Defense Agency		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MD40 / Program-Wide Support		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p>management of equipment; Facilities Sustainment, Restoration and Modernization (FSRM) program (formerly Real Property Maintenance) to keep the Department's inventory of facilities in good working order; and similar operating expenses. PWS is allocated on a pro-rata basis across most Agency PEs and therefore fluctuates per PE by fiscal year based on the total Agency budget in that fiscal year.</p> <p><b>FY 2024 Plans:</b> - SEE ABOVE.</p> <p><b>FY 2025 Plans:</b> - SEE ABOVE.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Increase from FY 2024 to FY 2025 provides the PWS allocation on a pro-rata basis across multiple Agency PEs each fiscal year based on the total Agency budget, and therefore fluctuates per PE by fiscal year.</p>				
<b>Accomplishments/Planned Programs Subtotals</b>		5.979	6.382	7.597
<b>C. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>D. Acquisition Strategy</b>				
<p>The acquisition strategy for MDA Consolidated Support consists of contract actions to industry for: a) Engineering and technical support; b) studies, analyses, and evaluations; and c) management and professional services to MDA functional organizations and program offices. With a focus to achieve Small Business goals, MDA is leveraging existing contracts and will competitively award new contracts to meet MDA's Fiscal Years 2020-2030 Advisory and Assistance Services support.</p>				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Missile Defense Agency												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)						
0400 / 4				PE 0603907C / Sea Based X-Band Radar (SBX)					MD40 / Program-Wide Support						
Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
Program Wide Support - Agency Operations and Support Services #2	C/FFP	HUNTSVILLE REHABILITATION FOUNDATION : Various	0.000	0.000		0.000		2.291	Nov 2024	-		2.291	Continuing	Continuing	Continuing
Program Wide Support - Agency Facilities and Maintenance SRM	MIPR	Army Corps of Engineers : Various	0.000	1.668	Nov 2022	2.265	Nov 2023	2.933	Nov 2024	-		2.933	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services	C/CPFF	VENTURI, INC. : Various	0.000	4.236	Nov 2022	4.117	Nov 2023	0.000		-		0.000	0.000	8.353	0.000
Program Wide Support - Agency Operations, Sustainment and GPC	Various	Facilities Resource Group : Various	0.000	0.000		0.000		2.373	Nov 2024	-		2.373	Continuing	Continuing	Continuing
Program Wide Support - Prior year no longer funded in the FYDP	Various	Various : Various	9.154	0.000		0.000		0.000		-		0.000	0.000	9.154	0.000
Program Wide Support - Program Wide Support - Agency Operations Management	Various	Various Multi: : AK, AL, CA, CO, VA	2.357	0.000		0.000		0.000		-		0.000	0.000	2.357	0.000
Program Wide Support - Program Wide Support - Agency Operations and Support Civilian Salaries, Travel, Training	Allot	MDA Multi : AK, AL, CA, CO, VA	1.606	0.075	Oct 2022	0.000		0.000		-		0.000	0.000	1.681	0.000
Program Wide Support - Program Wide Support - Agency Operations and Support Other Agency Services (MIPRs)	MIPR	Various Multi: : AK, AL, CA, CO, VA	31.893	0.000		0.000		0.000		-		0.000	0.000	31.893	0.000
Program Wide Support - Program Wide Support - Agency Operations and Support Services (FFP)	C/FFP	Various Multi: : VA, WA	0.505	0.000		0.000		0.000		-		0.000	0.000	0.505	0.000

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Missile Defense Agency** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / Sea Based X-Band Radar (SBX)	<b>Project (Number/Name)</b> MD40 / Program-Wide Support
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Support (\$ in Millions)				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			
<b>Subtotal</b>			45.515	5.979		6.382		7.597		-		7.597	Continuing	Continuing	N/A

**Remarks**  
N/A

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	45.515	5.979	6.382	7.597	-	7.597	Continuing	Continuing	N/A

**Remarks**  
Award Date reflects date of first obligation. Additional obligations may incrementally occur throughout the year.

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**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Missile Defense Agency** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / <i>Sea Based X-Band Radar (SBX)</i>	<b>Project (Number/Name)</b> MD40 / <i>Program-Wide Support</i>
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Significant Event Complete ▲	Milestone Decision Complete ★	Element Test Complete ◆	System Level Test Complete ●	Complete Activity ◆														
Significant Event Planned △	Milestone Decision Planned ☆	Element Test Planned ◇	System Level Test Planned ○	Planned Activity ◇														
			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 12.5%;">FY 2023</th> <th style="width: 12.5%;">FY 2024</th> <th style="width: 12.5%;">FY 2025</th> <th style="width: 12.5%;">FY 2026</th> <th style="width: 12.5%;">FY 2027</th> <th style="width: 12.5%;">FY 2028</th> <th style="width: 12.5%;">FY 2029</th> </tr> <tr> <td>◇◇◇◇</td> <td>◇◇◇◇</td> <td>◇◇◇◇</td> <td>◇◇◇◇</td> <td>◇◇◇◇</td> <td>◇◇◇◇</td> <td>◇◇◇◇</td> </tr> </table>	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇	
FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029												
◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇	◇◇◇◇												
MD40 Program-Wide Support																		

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Missile Defense Agency		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 0400 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603907C / <i>Sea Based X-Band Radar (SBX)</i>	<b>Project (Number/Name)</b> MD40 / <i>Program-Wide Support</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MD40 Program-Wide Support	1	2023	4	2029