

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2022 Missile Defense Agency **Date:** May 2021

<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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	814.791	137.604	118.318	147.241	-	147.241	-	-	-	-	-	-
<i>MX46: Sea Based X-Band Radar Development Support</i>	784.717	132.537	113.618	141.567	-	141.567	-	-	-	-	-	-
<i>MD40: Program-Wide Support</i>	30.074	5.067	4.700	5.674	-	5.674	-	-	-	-	-	-

**Program MDAP/MAIS Code:** 362

**Note**

Increase from FY 2021 to FY 2022 provides for Sea Based X-Band Radar (SBX) in-port maintenance period, recurring 2.5-year U.S. Coast Guard/American Bureau of Shipping surveys, and continuation of the radome replacement.

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

The Sea Based X-Band Radar (SBX) is an advanced X-band radar that provides the capability for 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 (MDS) Homeland Defense mission by tracking and discriminating sophisticated Intercontinental Ballistic Missile (ICBM) threats.

The SBX operates at sea for MDS 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 as well as software compatibility with the MDS.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Previous President's Budget	128.156	118.318	135.931	-	135.931
Current President's Budget	137.604	118.318	147.241	-	147.241
Total Adjustments	9.448	0.000	11.310	-	11.310
• 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			
• Missile Defeat and Defense Enhancement	0.000	0.000	0.000	-	0.000
• Other Adjustment	9.448	0.000	11.310	-	11.310

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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2022 Missile Defense Agency **Date:** May 2021

**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**

Increase in FY 2020 provides realignment of Agency funding from MDS Sensor Test (0604879C) to Sea Based X-Band Radar (0603907C) to initiate SBX radome replacement.

Increase in FY 2022 provides for the continuation of the SBX radome replacement and in-port maintenance.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2022 Missile Defense Agency										<b>Date:</b> May 2021		
<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>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
MX46: Sea Based X-Band Radar Development Support	784.717	132.537	113.618	141.567	-	141.567	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

Increase from FY 2021 to FY 2022 provides for SBX in-port maintenance period, recurring 2.5-year U.S. Coast Guard/American Bureau of Shipping surveys, and continuation of the SBX radome replacement.

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

This project provides developmental operations and support of the SBX Radar and its four major sub-systems: the self-propelled vessel; the X-Band Radar (XBR); the In-Flight Interceptor Communications System Data Terminal; 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 shore side security. The FY 2022 budget reflects the continued development required to deliver MDS enhanced discrimination capability.

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

	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
<b>Title:</b> Vessel Operations and Support	66.901	64.347	71.124
<b>Articles:</b>	-	-	-
<b>Description:</b> Vessel Operations and Support provides for sustainment of the SBX vessel for full operations. This effort maintains annual surveys and U.S. Coast Guard Certifications to ensure readiness for operational contingencies, provides for resupply of SBX, and conducts in port and underway maintenance. The SBX participates in MDS ground tests and flight tests per the Integrated Master Test Plan (IMTP). This effort also provides force protection for SBX, maintenance repair, air charter transportation, supply vessel charters, and Variable Speed Drive (VSD) upgrades.			
Specific and/or unique accomplishments to each FY are as follows:			
<b>FY 2021 Plans:</b> - SEE ABOVE.			
<b>FY 2022 Plans:</b> - Conduct in port SBX maintenance period and recurring 2.5-year U.S. Coast Guard/American Bureau of Shipping surveys.			
<b>FY 2021 to FY 2022 Increase/Decrease Statement:</b>			

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**Exhibit R-2A, RDT&E Project Justification:** PB 2022 Missile Defense Agency **Date:** May 2021

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

	FY 2020	FY 2021	FY 2022
Increase from FY 2021 to FY 2022 provides for SBX in-port maintenance period and recurring 2.5-year U.S. Coast Guard/American Bureau of Shipping surveys.			
<b>Title:</b> XBR Operations and Support	65.636	49.271	70.443
<b>Articles:</b>	-	-	-
<b>Description:</b> This effort operates and sustains the XBR at full operations, operates and sustains SBX communications systems, performs mission integration functions, and provides support for contingency operations with manning for improved readiness enabling rapid response time from notification to underway. XBR Operations and Support maintains limited software sustainment for system capability with the MDS and fields additional XBR capability to the Warfighter with the MDS capability increment. This effort also provides precision track, discrimination, and hit assessment for engagement support in MDS ground tests and flight tests per the approved IMTP. Additional development efforts include XBR x86 software development and testing for initial fielding to increase the XBR processing capabilities.			
Specific and/or unique accomplishments to each FY are as follows:			
<b>FY 2021 Plans:</b> - SEE ABOVE.			
<b>FY 2022 Plans:</b> - Complete XBR x86 software initial fielding to increase the XBR processing capabilities. - Continuation of radome replacement effort, expected to complete in 2025.			
<b>FY 2021 to FY 2022 Increase/Decrease Statement:</b> Increase from FY 2021 to FY 2022 provides for the continuation of the radome replacement effort and increased operating costs in the software assurance effort for software quality improvements. In addition, the Mission Integration funding was realigned from Vessel Operations and Support to XBR Operations and Support to better align with mission description.			
<b>Accomplishments/Planned Programs Subtotals</b>	132.537	113.618	141.567

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

<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603882C: Ballistic Missile Defense Midcourse Defense Segment	1,275.414	1,219.261	745.144	-	745.144	-	-	-	-	-	-

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**Exhibit R-2A, RDT&E Project Justification:** PB 2022 Missile Defense Agency **Date:** May 2021

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

<b>Line Item</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	348.356	265.803	224.750	-	224.750	-	-	-	-	-	-
• 0603891C: <i>Special Programs - MDA</i>	504.031	390.216	413.374	-	413.374	-	-	-	-	-	-
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management &amp; Communication</i>	550.513	645.741	603.448	-	603.448	-	-	-	-	-	-
• 0603898C: <i>Ballistic Missile Defense Joint Warfighter Support</i>	51.095	49.560	50.594	-	50.594	-	-	-	-	-	-
• 0603904C: <i>Missile Defense Integration and Operations Center (MDIOC)</i>	54.783	55.356	52.403	-	52.403	-	-	-	-	-	-
• 0604879C: <i>Ballistic Missile Defense Sensor Test</i>	96.082	64.245	77.428	-	77.428	-	-	-	-	-	-

**Remarks**

**D. Acquisition Strategy**

The SBX is contractor operated and maintained through a variety of contracts between the Navy and MDA. SBX-1 Vessel Management 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 2022 Missile Defense Agency** **Date:** May 2021

<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 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 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>			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	N/A

**Remarks**  
N/A

<b>Support (\$ in Millions)</b>				<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 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	Military Sealift Command : VA	0.000	0.000		0.000		1.050	Oct 2021	-		1.050	Continuing	Continuing	Continuing
Vessel Operations and Support - Force Protection	MIPR	Military Sealift Command : VA	5.700	6.381	Oct 2019	6.482	Oct 2020	5.850	Oct 2021	-		5.850	Continuing	Continuing	Continuing
Vessel Operations and Support - Fuel	MIPR	Military Sealift Command : VA	67.355	8.256	Oct 2019	10.535	Oct 2020	8.500	Oct 2021	-		8.500	Continuing	Continuing	Continuing
Vessel Operations and Support - Navy Program Management Office	MIPR	Military Sealift Command : VA	7.920	2.639	Oct 2019	2.910	Oct 2020	3.571	Oct 2021	-		3.571	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 Support Vessel (OSV Resupply)	MIPR	Military Sealift Command : VA	45.740	17.412	Oct 2019	15.009	Oct 2020	14.600	Oct 2021	-		14.600	Continuing	Continuing	Continuing
Vessel Operations and Support - SBX Operations & Support (Vessel)	MIPR	Military Sealift Command : VA	200.661	23.194	Oct 2019	20.598	Oct 2020	37.553	Oct 2021	-		37.553	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

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Missile Defense Agency** **Date:** May 2021

<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 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
Vessel Operations and Support - Vessel Mission Integration	C/CPIF	Gryphon Tech. : AL/ HI	68.215	9.019	Dec 2019	8.813	Dec 2020	0.000		-		0.000	0.000	86.047	0.000
XBR Operations and Support - Civilian Salaries/ Travel	Allot	MDA : Various	0.000	1.456	Oct 2019	1.893	Oct 2020	1.356	Oct 2021	-		1.356	Continuing	Continuing	Continuing
XBR Operations and Support - Contract Support Services	Various	MDA : Various	0.000	1.200	Oct 2019	1.542	Oct 2020	2.059	Oct 2021	-		2.059	Continuing	Continuing	Continuing
XBR Operations and Support - FFRDC/UARC	MIPR	MITRE : AL	0.000	0.000		0.653	Nov 2020	0.349	Nov 2021	-		0.349	Continuing	Continuing	Continuing
XBR Operations and Support - Mission Integration	C/CPIF	Gryphon Tech : AL/ HI	0.000	0.000		0.000		9.286	Dec 2021	-		9.286	Continuing	Continuing	Continuing
XBR Operations and Support - Network And Infrastructure Services	C/CPAF	Jacobs Engineering : AL, CO, HI, NM, VA	0.420	0.435	Jan 2020	0.439	Jan 2021	0.438	Jan 2022	-		0.438	Continuing	Continuing	Continuing
XBR Operations and Support - SBX Communications Support	SS/CPIF	Boeing : AL/ HI	15.541	1.579	Jan 2020	2.520	Jan 2021	2.565	Jan 2022	-		2.565	Continuing	Continuing	Continuing
XBR Operations and Support - XBR Operations & Support	SS/CPFF	Raytheon : AL/AK/ HI	330.470	54.466	Dec 2019	35.983	Dec 2020	38.388	Dec 2021	-		38.388	Continuing	Continuing	Continuing
XBR Operations and Support - XBR Operations & Support-Radome Replacement	SS/CPFF	RAYTHEON : MA	0.000	6.500	Sep 2020	6.241	Dec 2020	16.002	Nov 2021	-		16.002	Continuing	Continuing	Continuing
<b>Subtotal</b>			784.717	132.537		113.618		141.567		-		141.567	Continuing	Continuing	N/A

**Remarks**  
N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Missile Defense Agency** **Date:** May 2021

<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>Test and Evaluation (\$ in Millions)</b>				<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 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>			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	N/A

**Remarks**  
N/A

<b>Management Services (\$ in Millions)</b>				<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 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>			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	N/A

**Remarks**  
N/A

<b>Project Cost Totals</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
784.717	784.717	132.537	113.618	141.567	-	141.567	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 2022 Missile Defense Agency** **Date:** May 2021

<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 2020			FY 2021			FY 2022			FY 2023			FY 2024			FY 2025			FY 2026				
GTI-07c (N/I) (MDS Ground Test)	◆																						
GTI-08a (N/I) (MDS Ground Test)			◇	◇	◇	◇	◇																
FTM-44 (AEGIS 5.1, DT Intercept Flight Test)				▲																			
GTD-08a (N/I) (MDS Ground Test)							◇																
GTI-08b Sprint 1 (N/I) (MDS Ground Test)								◇															
FTX-45									△														
FTX-26 (OT) (SN, OT Target Only Flight Test)										△													
SICO-08b (MDS Ground Test)									◇														

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2022 Missile Defense Agency		<b>Date:</b> May 2021
<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>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GTI-07c (N/I) (MDS Ground Test)	1	2020	1	2020
GTI-08a (N/I) (MDS Ground Test)	4	2020	4	2021
FTM-44 (AEGIS 5.1, DT Intercept Flight Test)	1	2021	1	2021
GTD-08a (N/I) (MDS Ground Test)	2	2022	2	2022
GTI-08b Sprint 1 (N/I) (MDS Ground Test)	3	2022	3	2022
FTX-45	3	2022	3	2022
FTX-26 (OT) (SN, OT Target Only Flight Test)	4	2022	4	2022
SICO-08b (MDS Ground Test)	4	2022	4	2022

**Note**

Based on the OUSD(C) FY 2022 President's Budget Submission Guidance, fiscal years covered in the justification material will include FY 2020 through FY 2022. Planned entries in the R4 may continue past FY 2022, out-years will be addressed in future budget submissions.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2022 Missile Defense Agency **Date:** May 2021

<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 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
MD40: Program-Wide Support	30.074	5.067	4.700	5.674	-	5.674	-	-	-	-	-	-
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 MDS. These functions include Government Civilians and Contract Support Services. This effort provides integrity and oversight of the MDS 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 2020	FY 2021	FY 2022
<b>Title:</b> Program Wide Support	5.067	4.700	5.674
<b>Articles:</b>	-	-	-
<b>Description:</b> PWS contains non-headquarters management costs in support of MDA functions and activities across the entire MDS. These functions include Government Civilians and Contract Support Services. This effort provides integrity and oversight of the MDS 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,			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2022 Missile Defense Agency	<b>Date:</b> May 2021
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<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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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	FY 2020	FY 2021	FY 2022
<p>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 2021 Plans:</b> - SEE ABOVE.</p> <p><b>FY 2022 Plans:</b> - SEE ABOVE.</p> <p><b>FY 2021 to FY 2022 Increase/Decrease Statement:</b> Increase from FY 2021 to FY 2022 provides the PWS allocation on a pro-rata basis across multiple Agency PE's each fiscal year based on the total Agency budget, and therefore fluctuates per PE by fiscal year.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>	5.067	4.700	5.674

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

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Missile Defense Agency** **Date:** May 2021

<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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<b>Support (\$ in Millions)</b>				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
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	1.994	0.076	Jul 2020	0.142	Jul 2021	0.145	Jul 2022	-		0.145	Continuing	Continuing	Continuing
Program Wide Support - Program Wide Support - Agency Operations and Support Civilian Salaries, Travel, Training	Various	MDA Multi : AK, AL, CA, CO, VA	0.000	0.000		1.606	Jan 2021	0.000		-		0.000	0.000	1.606	0.000
Program Wide Support - Program Wide Support - Agency Operations and Support Other Agency Services (MIPRs)	MIPR	Various Multi : AK, AL, CA, CO, VA	18.708	4.991	Nov 2019	2.799	Nov 2020	5.395	Nov 2021	-		5.395	Continuing	Continuing	Continuing
Program Wide Support - Program Wide Support - Agency Operations and Support Services (FFP)	C/FFP	Various Multi : VA, WA	0.218	0.000		0.153	Jun 2021	0.134	May 2022	-		0.134	Continuing	Continuing	Continuing
<b>Subtotal</b>			30.074	5.067		4.700		5.674		-		5.674	Continuing	Continuing	N/A

**Remarks**  
N/A

<b>Management Services (\$ in Millions)</b>				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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>			-	-		-		-		-		-	-	-	N/A

**Remarks**  
N/A

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2022 Missile Defense Agency							<b>Date:</b> May 2021				
<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>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>		
<b>Project Cost Totals</b>	30.074	5.067	4.700	5.674	-	5.674	Continuing	Continuing	N/A		

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

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2022 Missile Defense Agency</b>							<b>Date: May 2021</b>											
<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>											
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 2020		FY 2021		FY 2022		FY 2023		FY 2024		FY 2025		FY 2026	
MD40 Program-Wide Support					◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2022 Missile Defense Agency		<b>Date:</b> May 2021
<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	2020	4	2022

**Note**

Based on the OUSD(C) FY 2022 President's Budget Submission Guidance, fiscal years covered in the justification material will include FY 2020 through FY 2022. Planned entries in the R4 may continue past FY 2022, out-years will be addressed in future budget submissions.