

**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 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>
---	---

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	906.782	131.135	138.317	133.335	-	133.335	-	-	-	-	-	-
MD96: <i>Long Range Discrim Radar (LRDR)</i>	859.259	126.158	132.865	128.192	-	128.192	-	-	-	-	-	-
MD40: <i>Program Wide Support</i>	47.523	4.977	5.452	5.143	-	5.143	-	-	-	-	-	-

**Program MDAP/MAIS Code:** 362

**Note**  
 Decrease from FY 2021 to FY 2022 reflects the completion of Long Range Discrimination Radar (LRDR) Increment 6B.1 effort required for LRDR to be added to the Operational Capacity Baseline.

**A. Mission Description and Budget Item Justification**  
 The mission of the LRDR program is to design, develop, integrate, deliver, field, and sustain the LRDR as an element of the Missile Defense System (MDS) Increment 6B.1 Homeland Defense (HLD) Capability. This capability is representative of LRDR Configuration 1. Initial fielding of the LRDR was planned for late 2020 leading to approval to add LRDR to the MDS Operational Capacity Baseline (OCB) in FY 2021 and an Operational Acceptance (OA) by the United States Space Force (USSF) in FY 2023. Those milestones were impacted by a cessation of work at Clear Air Force Station, AK in the spring of 2020 to mitigate the potential spread of COVID-19. Initial fielding of LRDR is delayed until FY 2022 and LRDR will now be added to the OCB in FY 2022. Configuration 2 represents MDS Increment 6C/7, which includes software upgrades to LRDR to assess and further improve discrimination techniques and capability which will expand capability to a broader spectrum of threats, increase support to Space Domain Awareness and Space Object Identification, and implement cost reduction initiatives to reduce life cycle operating costs. The OCB/ Technical Capability Declaration (TCD) for Configuration 2 is planned for FY 2024. The LRDR is comprised of a LRDR Equipment Shelter (LES), housing two radar array faces, a Mission Control Facility (MCF), which supports radar operations, and supporting facilities and infrastructure. The Secretary of the Air Force approved Clear Air Force Station, AK as the LRDR site. The USSF Space Operations Command (SpOC) is the designated Lead Major Command (MAJCOM).

The LRDR operates in the S-band frequency, features scalable and open systems architecture to mitigate evolving threats, and integrates into the MDS through the Command and Control, Battle Management, and Communications (C2BMC) system. This Program Element includes MDS threat discrimination improvements to enhance MDS effectiveness against the evolving threat. The result will be a MDS architecture more capable of discriminating and intercepting re-entry vehicles with a higher degree of confidence to improve Warfighter shot doctrine, and conserve Ground-Based Defense (GMD) interceptor inventory. LRDR also supports additional mission areas including Space Domain Awareness.

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2022 Missile Defense Agency	<b>Date:</b> May 2021
---	-----------------------

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>
---	---

<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	136.423	137.256	118.787	-	118.787
Current President's Budget	131.135	138.317	133.335	-	133.335
Total Adjustments	-5.288	1.061	14.548	-	14.548
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	1.061			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-3.371	0.000			
• Missile Defeat and Defense Enhancement	0.000	0.000	0.000	-	0.000
• Other Adjustment	-1.917	0.000	14.548	-	14.548

**Change Summary Explanation**

The \$1.061 million increase in FY 2021 provides a portion of the undistributed Congressional add to restore Defense Wide Review (DWR) Missile Defense Agency manpower reduction.

The \$14.548 million increase in FY 2022 provides funding related to COVID-19 impacts.

**UNCLASSIFIED**

<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 0604873C / Long Range Discrimination Radar (LRDR)				<b>Project (Number/Name)</b> MD96 / Long Range Discrim Radar (LRDR)			
<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>
MD96: Long Range Discrim Radar (LRDR)	859.259	126.158	132.865	128.192	-	128.192	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

**Note**

The decrease from FY 2021 to FY 2022 reflects the completion of LRDR Increment 6B.1 effort required for LRDR to be added to the Operational Capacity Baseline.

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

This project includes the development of a Configuration 1 Long Range Discrimination Radar (LRDR) which will provide an improved persistent midcourse MDS discrimination capability in the Pacific sensor architecture. The initial fielding of the Configuration 1 LRDR capability will be completed by FY 2022 and operational fielding of LRDR will be completed when added to the Operational Capacity Baseline (OCB) in late FY 2022 leading to Operational Acceptance (OA) by the United States Space Force (USSF) in FY 2023. The LRDR will also increase the defensive capacity of the Ground-Based Midcourse Defense (GMD) interceptor inventory and address evolving threats. MDA's request includes funding for the design and development of the LRDR, system engineering, software development, software Independent Verification and Validation (IV&V), qualification testing, developmental testing support, Modeling and Simulation (M&S), and acquisition sustainment. M&S includes development of LRDR digital simulations and their integration into the MDS, M&S architecture, and Verification, Validation, and Accreditation (VV&A) of LRDR models. The USSF will leverage the LRDR inherent capabilities to augment ancillary missions including Space Object Identification and Space Situational Awareness.

This project also includes Configuration 2 software upgrades. Configuration 2 represents MDS Increment 6C/7 which includes software upgrades to LRDR to further verify and improve discrimination techniques and capability, verify and improve electronic protection techniques and capability, expand capability to a broader spectrum of threats, increase support to Space Domain Awareness and Space Object Identification, and implement cost reduction initiatives to reduce life cycle operating costs. Technical Capability Declaration for Configuration 2 is planned for FY 2024.

**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> Long Range Discrimination Radar (LRDR)	126.158	132.865	128.192
<b>Articles:</b>	-	-	-
<b>Description:</b> The LRDR program includes requirement development activities associated with systems engineering, software development, discrimination improvements, design reviews, testing, and M&S efforts for radar development. Efforts include LRDR site activation and preparation of site infrastructure for construction activities. The program will develop and integrate C2BMC systems for LRDR functionality. The program will develop, maintain, and deliver radar software Build 1 and establish the Independent Verification and Validation (IV&V) lab for testing of operational software. The program includes purchase, manufacture, integration and test of radar materials. This program will also establish the operational baseline, initiate radar			

**UNCLASSIFIED**

<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 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>	<b>Project (Number/Name)</b> MD96 / <i>Long Range Discrim Radar (LRDR)</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
<p>operations and communication, and initiate sustainment operations. The program also includes logistics management, reliability, availability, maintainability (RAM) efforts, data management, and operations support for the LRDR program office.</p> <p>Specific and/or unique accomplishments to each FY are as follows:</p> <p><b>FY 2021 Plans:</b></p> <ul style="list-style-type: none"> <li>-- Complete LRDR integration at Clear Air Force Station (CAFS) Alaska and Initiate system testing</li> <li>-- Complete acceptance testing for the delivery of Configuration 1/Government acceptance of radar (DD250)</li> <li>-- Initiate the Missile Defense Operations Centers (MDOCs) for LRDR</li> <li>-- Initiate support to ground and flight test programs</li> <li>-- Complete cybersecurity testing</li> <li>-- Continue planning and readiness for sustainment of Configuration 1 system</li> <li>-- Initiate Configuration 2 software development</li> <li>-- Initiate iterative System Requirements Review (SRR) process for Configuration 2</li> <li>-- Provides funding for estimated COVID-19 impacts</li> </ul> <p><b>FY 2022 Plans:</b></p> <ul style="list-style-type: none"> <li>-- Achieve Authority to Operate</li> <li>-- Achieve final Government acceptance of radar (DD 250)</li> <li>-- Complete LRDR addition to the Operational Capacity Baseline for Increment 6B.1</li> <li>-- Continue efforts to achieve Operational Acceptance by USSF by FY 2023</li> <li>-- Continue Configuration 2 development</li> <li>--Cost Reduction Initiative to reduce power consumption</li> <li>--Enhanced Space Domain Awareness (SDA) / Space Object Identification (SOI) messaging</li> <li>--Expanded reporting / messaging</li> <li>--Cybersecurity upgrades</li> <li>-- Complete iterative SRR process for Configuration 2</li> <li>-- Complete Preliminary Design Review (PDR) and Critical Design Review (CDR) for Configuration 2</li> <li>-- Continue post-fielding operations and sustainment</li> <li>-- Complete demobilization of Temporary Workforce Camp (TWC) at CAFS</li> </ul> <p><b>FY 2021 to FY 2022 Increase/Decrease Statement:</b></p>			

**UNCLASSIFIED**

<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 0604873C / Long Range Discrimination Radar (LRDR)	<b>Project (Number/Name)</b> MD96 / Long Range Discrim Radar (LRDR)

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Decrease from FY 2021 to FY 2022 reflects the completion of LRDR Increment 6B.1 effort required for LRDR to be added to the Operational Capacity Baseline.			
<b>Accomplishments/Planned Programs Subtotals</b>	126.158	132.865	128.192

**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>
• 0603882C: Ballistic Missile Defense Midcourse Defense Segment	1,275.414	1,219.261	745.144	-	745.144	-	-	-	-	-	-
• 0603884C: Ballistic Missile Defense Sensors	348.356	265.803	224.750	-	224.750	-	-	-	-	-	-
• 0603896C: Ballistic Missile Defense Command and Control, Battle Management & Communication	550.513	645.741	603.448	-	603.448	-	-	-	-	-	-
• 0603904C: Missile Defense Integration and Operations Center (MDIOC)	54.783	55.356	52.403	-	52.403	-	-	-	-	-	-
• 0604672C: Homeland Defense Radar-Hawaii	181.569	133.000	0.000	-	0.000	-	-	-	-	-	-
• 0604873C: Long Range Discrimination Radar MILCON	0.000	0.000	0.000	-	0.000	-	-	-	-	-	-
• 0604879C: Ballistic Missile Defense Sensor Test	96.082	64.245	77.428	-	77.428	-	-	-	-	-	-

**Remarks**

**D. Acquisition Strategy**

The LRDR acquisition strategy, which was approved on January 7, 2015, incorporates robust acquisition practices to ensure delivery of a best value solution that meets mission performance requirements and reduces lifecycle costs. MDA awarded a fixed-price incentive contract to Lockheed Martin Corporation of Moorestown, NJ, on October 21, 2015 to design, develop, manufacture, integrate & test, and field the LRDR prime mission equipment. The prime contract included other fixed-price and cost-reimbursable line items and options in order to properly balance acquisition costs and risks. Performance and cost incentives were included to motivate contractor performance. The radar prime contractor will deliver a full technical data package, which will enable the government to effectively and affordably sustain the system.

**UNCLASSIFIED**

<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 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>	<b>Project (Number/Name)</b> MD96 / <i>Long Range Discrim Radar (LRDR)</i>

MDA will synchronize the radar development contract efforts with a simultaneous Military Construction (MILCON) effort, which will be executed through the US Army Corps of Engineers. The LRDR is expected to complete development and initial fielding in FY 2022 for MDS integration and testing of Configuration 1 and in 2024 for Configuration 2.

**UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Missile Defense Agency												Date: May 2021			
Appropriation/Budget Activity						R-1 Program Element (Number/Name)				Project (Number/Name)					
0400 / 4						PE 0604873C / Long Range Discrimination Radar (LRDR)				MD96 / Long Range Discrim Radar (LRDR)					
Product Development (\$ in Millions)				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
Long Range Discrimination Radar (LRDR) - BMEWS Remediation and Removal	MIPR	USACE : AL, AK	25.110	0.000		0.000		0.000		-		0.000	0.000	25.110	0.000
Long Range Discrimination Radar (LRDR) - Civilians/Travel	Allot	MDA : AL	2.413	3.462	Oct 2019	3.736	Oct 2020	3.725	Oct 2021	-		3.725	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Communications Integration	SS/CPIF	Lockheed Martin : AL, NJ	27.719	7.267	May 2020	1.417	May 2021	0.732	May 2022	-		0.732	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Contract Support Services	Various	Various : Various	5.257	4.152	Oct 2019	3.400	Oct 2020	6.127	Oct 2021	-		6.127	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - FFRDC/UARC/OGA	MIPR	GTRI, JHU/APL, MITRE, MIT/LL : AL, GA, IL, MA, VA	3.385	2.657	Oct 2019	3.876	Oct 2020	2.390	Oct 2021	-		2.390	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Hybrid Program Office	MIPR	US Air Force : Various	0.000	0.692	Oct 2019	0.000		0.000		-		0.000	0.000	0.692	0.000
Long Range Discrimination Radar (LRDR) - IV&V	MIPR	AMRDEC : Huntsville, AL	11.493	3.853	Nov 2019	4.653	Nov 2020	4.388	Nov 2021	-		4.388	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Prime Contractor -Configuration 1	C/FPIF	Lockheed Martin : NJ	677.677	81.524	Nov 2019	74.617	Nov 2020	17.884	Nov 2021	-		17.884	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Prime Contractor -Configuration 2	SS/CPIF	Lockheed Martin : NJ	0.000	0.000		1.902	Jan 2021	67.000	Oct 2021	-		67.000	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Program Office - No longer funded in this cost category	Various	MDA, JHU/APL, GSA AL, MA, IL : AL, MA, IL	10.616	0.000		0.000		0.000		-		0.000	0.000	10.616	0.000
Long Range Discrimination Radar (LRDR) - Radar	MIPR	USAF : AK	0.000	9.134	Oct 2019	20.796	Nov 2020	24.006	Nov 2021	-		24.006	Continuing	Continuing	Continuing

**UNCLASSIFIED**

<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 0604873C / Long Range Discrimination Radar (LRDR)					<b>Project (Number/Name)</b> MD96 / Long Range Discrim Radar (LRDR)				

<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>			
Operations, Sustainment, and Fuel															
Long Range Discrimination Radar (LRDR) - Site Activation & Studies	MIPR	USACE : AL, AK	95.589	13.417	Feb 2020	14.891	Feb 2021	1.710	Feb 2022	-		1.710	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Transition & Transfer	C/TBD	MDA : AL	0.000	0.000		3.577	Jan 2021	0.230	Jan 2022	-		0.230	Continuing	Continuing	Continuing
<b>Subtotal</b>			859.259	126.158		132.865		128.192		-		128.192	Continuing	Continuing	N/A

**Remarks**  
N/A

	<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>	859.259	126.158	132.865	128.192	-	128.192	Continuing	Continuing	N/A

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

**UNCLASSIFIED**

**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 0604873C / Long Range Discrimination Radar (LRDR)	<b>Project (Number/Name)</b> MD96 / Long Range Discrim Radar (LRDR)
--	--	--

	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			
Long Range Discrimination Radar Capability	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇																
GTI-08a (N/I) (MDS Ground Test)					◇	◇	◇	◇																				
System Requirements Review for Configuration 2											△																	
Initial Fielding												△																
GTD-08a (N/I) (MDS Ground Test)												◇																
GTI-08b Sprint 1 (N/I) (MDS Ground Test)												◇																
FTX-45												△																
LRDR Operational Capacity Baseline (OCB) / Increment 6B.1 Technical Capability Declaration (TCD)																△												
FTX-26 (OT) (SN, OT Target Only Flight Test)																△												
SICO-08b (MDS Ground Test)												◇																

**UNCLASSIFIED**

<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 0604873C / Long Range Discrimination Radar (LRDR)	<b>Project (Number/Name)</b> MD96 / Long Range Discrim Radar (LRDR)

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Long Range Discrimination Radar Capability	1	2020	4	2022
GTI-08a (N/I) (MDS Ground Test)	4	2020	4	2021
System Requirements Review for Configuration 2	3	2021	3	2021
Initial Fielding	1	2022	1	2022
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
LRDR Operational Capacity Baseline (OCB) / Increment 6B.1 Technical Capability Declaration (TCD)	4	2022	4	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.

**UNCLASSIFIED**

**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 0604873C / Long Range Discrimination Radar (LRDR)	<b>Project (Number/Name)</b> MD40 / Program Wide Support
--	--	---

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	47.523	4.977	5.452	5.143	-	5.143	-	-	-	-	-	-
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	4.977	5.452	5.143
<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; the FSRM program			

**UNCLASSIFIED**

<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 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>	<b>Project (Number/Name)</b> MD40 / <i>Program Wide Support</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
<p>(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> N/A</p>				
<b>Accomplishments/Planned Programs Subtotals</b>		4.977	5.452	5.143
<b>C. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>D. Acquisition Strategy</b>				
N/A				

**UNCLASSIFIED**

**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 0604873C / Long Range Discrimination Radar (LRDR)	<b>Project (Number/Name)</b> MD40 / Program Wide Support
--	--	---

<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 - Agency Facilities and Maintenance SRM (MIPR)	MIPR	Various : Multi: AL, VA, Aust, Japan	24.395	0.000		0.000		0.000		-		0.000	0.000	24.395	0.000
Program Wide Support - Agency Operations Management	Various	Various : Multi: AL, CA, CO, VA	0.550	0.075	Jul 2020	0.000		0.000		-		0.000	0.000	0.625	0.000
Program Wide Support - Agency Operations Sustainment and GPC	C/FFP	Various : Multi: AL, CA, CO, VA etc.	2.327	0.000		0.000		0.000		-		0.000	0.000	2.327	0.000
Program Wide Support - Agency Operations and Support Services	C/CPFF	Various : Multi: AL, VA	15.125	4.902	Jul 2020	5.452	Apr 2021	5.143	Jan 2022	-		5.143	Continuing	Continuing	Continuing
Program Wide Support - Prior year no longer funded in the FYDP	Various	Various : Various	5.126	0.000		0.000		0.000		-		0.000	0.000	5.126	0.000
<b>Subtotal</b>			47.523	4.977		5.452		5.143		-		5.143	Continuing	Continuing	N/A

**Remarks**  
N/A

	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	47.523	4.977	5.452	5.143	-	5.143	Continuing	Continuing	N/A

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

**UNCLASSIFIED**

**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 0604873C / <i>Long Range Discrimination Radar (LRDR)</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					◇◇◇◇	◇◇◇◇	◇◇◇◇				

**UNCLASSIFIED**

<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 0604873C / <i>Long Range Discrimination Radar (LRDR)</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.