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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Missile Defense Agency **Date:** February 2020

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	734.077	172.705	136.423	137.256	-	137.256	118.787	90.299	60.251	41.726	Continuing	Continuing
MD96: <i>Long Range Discrim Radar (LRDR)</i>	694.500	164.759	131.446	131.804	-	131.804	114.073	86.668	57.168	39.450	Continuing	Continuing
MD40: <i>Program Wide Support</i>	39.577	7.946	4.977	5.452	-	5.452	4.714	3.631	3.083	2.276	Continuing	Continuing

Program MDAP/MAIS Code: 362

Note

N/A

A. Mission Description and Budget Item Justification

The mission of the Long Range Discrimination Radar (LRDR) program is to design, develop, integrate, deliver, field, and sustain the LRDR as an element of the Missile Defense System (MDS) Increment 6b Homeland Defense (HLD) Capability. This capability is representative of LRDR Configuration 1. Initial fielding of the LRDR is planned for 2020 leading to a Technical Capability Declaration (TCD) in FY 2021 and an Operational Capability Declaration (OCD) in FY 2022. Configuration 2 represents MDS Increment 6c/7 which includes software upgrades to LRDR to further improve discrimination techniques and capability, expand capability to a broader spectrum of threats, increase support to Space Situational 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. 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, Alaska as the LRDR site. The Air Force Space Command (AFSPC) 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 Situational Awareness.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Missile Defense Agency	Date: February 2020
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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>
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B. Program Change Summary (\$ in Millions)	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	166.543	136.423	122.877	-	122.877
Current President's Budget	172.705	136.423	137.256	-	137.256
Total Adjustments	6.162	0.000	14.379	-	14.379
• 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	-3.738	0.000			
• Missile Defeat and Defense Enhancement	0.000	0.000	0.000	-	0.000
• Other Adjustment	9.900	0.000	14.379	-	14.379

Change Summary Explanation

Increase in FY 2019 provides Prime Contract funding for unanticipated cost growth following award of the subcontract for the site and construction activities.

Increase in FY 2021 reflects the development initiation of Active Sensor Bias monitoring.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Missile Defense Agency										Date: February 2020		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0604873C / Long Range Discrimination Radar (LRDR)				Project (Number/Name) MD96 / Long Range Discrim Radar (LRDR)			
COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
MD96: Long Range Discrim Radar (LRDR)	694.500	164.759	131.446	131.804	-	131.804	114.073	86.668	57.168	39.450	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

N/A

A. Mission Description and Budget Item Justification

This project includes the development and initial fielding of a Long Range Discrimination Radar (LRDR) by 2020 (Configuration 1) leading to an Operational Capability Declaration in FY 2022 and an improved persistent midcourse MDS discrimination capability in the Pacific sensor architecture. 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, delivery of spares for initial fielding, system engineering, software development, software Independent Verification and Validation (IV&V), hardware manufacturing, 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 United States Air Force (USAF) 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 improve discrimination techniques and capability, expand capability to a broader spectrum of threats, increase support to Space Situational 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)

	FY 2019	FY 2020	FY 2021
Title: Long Range Discrimination Radar (LRDR)	164.759	131.446	131.804
Articles:	-	-	-
Description: 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			

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Missile Defense Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>	Project (Number/Name) MD96 / <i>Long Range Discrim Radar (LRDR)</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021
<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>FY 2020 Plans: Radar Assembly and Integration -- Complete shipment and installation of Arrays on-site at Clear Air Force Station (CAFS), AK -- Complete Mission Control Facility (MCF) / LRDR Equipment Shelter (LES) site integration with MILCON and C2BMC -- Continue execution of the Transition & Transfer (T2) checklist items -- Complete Space Missile Defense Command Warfighter training of C2BMC for LRDR functionality -- Complete Logistics Business Case Analysis and Depot Maintenance Planning -- Continue Independent Validation & Verification (IV&V) of tactical software on Hardware-in-the-Loop equipment -- Continue C2BMC pairwise testing and cyber security testing</p> <p>FY 2021 Plans: -- Complete the capability delivery of Configuration 1 -- Complete the Government acceptance of radar (DD250) -- Initiate the Missile Defense Operations Centers (MDOCs) for LRDR -- Initiate support to ground and flight test programs -- Complete cyber testing and achieve Authority to Operate -- Complete Technical Capability Declaration -- Initiate post-fielding sustainment of Configuration 1 system -- Initiate Configuration 2 software development -- Complete System Requirements Review (SRR) for Configuration 2 -- Initiate development of Active Sensor Bias monitoring</p> <p>FY 2020 to FY 2021 Increase/Decrease Statement: N/A</p>			
Accomplishments/Planned Programs Subtotals	164.759	131.446	131.804

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Missile Defense Agency										Date: February 2020	
Appropriation/Budget Activity 0400 / 4				R-1 Program Element (Number/Name) PE 0604873C / Long Range Discrimination Radar (LRDR)				Project (Number/Name) MD96 / Long Range Discrim Radar (LRDR)			

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

Line Item	FY 2019	FY 2020	FY 2021	FY 2021	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Cost To	
			Base	OCO	Total					Complete	Total Cost
• 0603882C: <i>Ballistic Missile Defense Midcourse Defense Segment</i>	790.316	1,303.716	1,004.305	-	1,004.305	776.125	726.566	767.592	1,068.536	Continuing	Continuing
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	382.759	352.288	281.957	-	281.957	576.699	656.539	574.703	593.592	Continuing	Continuing
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management & Communication</i>	500.965	549.756	593.353	-	593.353	593.330	546.471	581.376	543.971	Continuing	Continuing
• 0603904C: <i>Missile Defense Integration and Operations Center (MDIOC)</i>	51.689	56.161	55.356	-	55.356	55.721	57.457	59.798	61.334	Continuing	Continuing
• 0604672C: <i>Homeland Defense Radar-Hawaii</i>	70.735	188.480	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	259.215
• 0604873C: <i>Long Range Discrimination Radar MILCON</i>	174.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	174.000
• 0604879C: <i>Ballistic Missile Defense Sensor Test</i>	71.905	105.530	76.456	-	76.456	99.138	131.191	122.983	124.398	Continuing	Continuing
• 31299903: <i>MILCON PLANNING and DESIGN</i>	6.184	35.472	0.000	-	0.000	0.000	0.000	0.000	0.040	0.000	41.696

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, New Jersey, 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. MDA will synchronize the radar development contract efforts with a simultaneous MILCON effort, which will be executed through the US Army Corps of Engineers. The LRDR is expected to complete development and initial fielding in 2020 for MDS integration and testing of Configuration 1 and in 2024 for Configuration 2.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Missile Defense Agency												Date: February 2020			
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 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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	0.000	2.413	Oct 2018	3.203	Oct 2019	2.675	Oct 2020	-		2.675	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Communications Integration	SS/CPIF	Lockheed Martin : AL, NJ	23.719	4.000	May 2019	6.418	May 2020	1.417	May 2021	-		1.417	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Contract Support Services	Various	Various : Various	0.000	5.257	Oct 2018	4.197	Oct 2019	4.776	Oct 2020	-		4.776	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - FFRDC/UARC/OGA	MIPR	GTRI, JHU/APL, MITRE, MIT/LL : AL, GA, IL, MA, VA	0.000	3.385	Oct 2018	3.274	Oct 2019	3.700	Oct 2020	-		3.700	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Hybrid Program Office	MIPR	US Air Force : Various	0.000	0.000		2.947	Oct 2019	0.000		-		0.000	0.000	2.947	0.000
Long Range Discrimination Radar (LRDR) - IV&V	MIPR	AMRDEC : Huntsville, AL	8.629	2.864	Nov 2018	3.400	Nov 2019	4.653	Nov 2020	-		4.653	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Prime Contractor -Configuration 1	C/FPIF	Lockheed Martin : NJ	553.789	123.888	Nov 2018	86.920	Nov 2019	44.287	Nov 2020	-		44.287	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Prime Contractor -Configuration 2	SS/CPIF	Lockheed Martin : NJ	0.000	0.000		0.000		31.032	Jan 2021	-		31.032	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	0.000		0.000		20.796	Nov 2020	-		20.796	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Missile Defense Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / Long Range Discrimination Radar (LRDR)	Project (Number/Name) MD96 / Long Range Discrim Radar (LRDR)
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Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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			
Operations, Sustainment, and Fuel															
Long Range Discrimination Radar (LRDR) - Site Activation & Studies	MIPR	USACE : AL, AK	72.637	22.952	Feb 2019	17.058	Feb 2020	14.891	Feb 2021	-		14.891	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Transition & Transfer	C/TBD	MDA : AL	0.000	0.000		4.029	Jan 2020	3.577	Jan 2021	-		3.577	Continuing	Continuing	Continuing
Subtotal			694.500	164.759		131.446		131.804		-		131.804	Continuing	Continuing	N/A

Remarks
N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	694.500	164.759	131.446	131.804	-	131.804	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 2021 Missile Defense Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / Long Range Discrimination Radar (LRDR)	Project (Number/Name) MD96 / Long Range Discrim Radar (LRDR)
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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 2019			FY 2020			FY 2021			FY 2022			FY 2023			FY 2024			FY 2025			
Build 1.1 Software Delivery	▲																					
Long Range Discrimination Radar Capability	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇
Initial Fielding											△											
System Requirements Review for Configuration 2										△												
Technical Capability Declaration (TCD) Configuration 1											△											
FTX-26 (OT) (SN, OT Target Only Flight Test)											△											
Operational Capability Declaration (OCD)												△										
Technical Capability Declaration (TCD) Configuration 2																			△			

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Missile Defense Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>	Project (Number/Name) MD96 / <i>Long Range Discrim Radar (LRDR)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Build 1.1 Software Delivery	1	2019	1	2019
Long Range Discrimination Radar Capability	1	2019	4	2025
Initial Fielding	1	2021	1	2021
System Requirements Review for Configuration 2	1	2021	1	2021
Technical Capability Declaration (TCD) Configuration 1	3	2021	3	2021
FTX-26 (OT) (SN, OT Target Only Flight Test)	3	2021	3	2021
Operational Capability Declaration (OCD)	2	2022	2	2022
Technical Capability Declaration (TCD) Configuration 2	1	2024	1	2024

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Missile Defense Agency										Date: February 2020		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0604873C / Long Range Discrimination Radar (LRDR)				Project (Number/Name) MD40 / Program Wide Support			
COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
MD40: Program Wide Support	39.577	7.946	4.977	5.452	-	5.452	4.714	3.631	3.083	2.276	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 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 2019	FY 2020	FY 2021
Title: Program Wide Support	7.946	4.977	5.452
Articles:	-	-	-
Description: 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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Exhibit R-2A, RDT&E Project Justification: PB 2021 Missile Defense Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / Long Range Discrimination Radar (LRDR)	Project (Number/Name) MD40 / Program Wide Support

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2019	FY 2020	FY 2021
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.			
<i>FY 2020 Plans:</i> - SEE ABOVE.			
<i>FY 2021 Plans:</i> - SEE ABOVE.			
<i>FY 2020 to FY 2021 Increase/Decrease Statement:</i> N/A			
Accomplishments/Planned Programs Subtotals	7.946	4.977	5.452

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 2021 Missile Defense Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / Long Range Discrimination Radar (LRDR)	Project (Number/Name) MD40 / Program Wide Support
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Support (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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	20.000	4.395	Mar 2019	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	0.460	0.090	Jul 2019	0.075	Jul 2020	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.	0.735	1.592	Mar 2019	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	13.256	1.869	Jun 2019	4.902	Jul 2020	5.452	Apr 2021	-		5.452	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
Subtotal			39.577	7.946		4.977		5.452		-		5.452	Continuing	Continuing	N/A

Remarks
N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	39.577	7.946	4.977	5.452	-	5.452	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 2021 Missile Defense Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>	Project (Number/Name) 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 ◇														
					FY 2019		FY 2020		FY 2021		FY 2022		FY 2023		FY 2024		FY 2025	
MD40 Program-Wide Support					◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Missile Defense Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604873C / <i>Long Range Discrimination Radar (LRDR)</i>	Project (Number/Name) MD40 / <i>Program Wide Support</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MD40 Program-Wide Support	1	2019	4	2025