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

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 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	1,302.557	65.991	103.517	100.882	-	100.882	63.560	56.020	64.457	72.759	Continuing	Continuing
MD96: <i>Long Range Discrim Radar (LRDR)</i>	1,239.462	63.263	99.837	96.998	-	96.998	60.874	53.689	61.559	69.364	Continuing	Continuing
MD40: <i>Program Wide Support</i>	63.095	2.728	3.680	3.884	-	3.884	2.686	2.331	2.898	3.395	Continuing	Continuing

Program MDAP/MAIS Code: 362

Note

N/A

A. Mission Description and Budget Item Justification

The LRDR program supports and contributes to the Missile Defense Agency mission of developing and deploying a layered Missile Defense System to defend the homeland from missile attacks of all ranges, in all phases of flight by providing persistent long-range midcourse discrimination, precision tracking and hit assessment as an element of the Missile Defense System Homeland Defense Capability. The LRDR program also supports the Space Domain Awareness (SDA) and Space Object Identification (SOI) mission area.

The LRDR Program Element includes the requirements to design, develop, integrate, deliver, field, and sustain the LRDR. The LRDR operates in the S-band frequency with a scalable and open systems architecture to mitigate evolving threats and integrates into the Missile Defense System through the Command and Control, Battle Management, and Communications (C2BMC) system. This Program Element includes Missile Defense System threat discrimination improvements to enhance effectiveness against the evolving threat. The result will be a Missile Defense System architecture more capable of discriminating and interpreting re-entry vehicles with a higher degree of confidence to improve Warfighter engagement doctrine, and conserve Ground Based Interceptor inventory. The LRDR is comprised of an equipment shelter, two radar array faces, a mission control facility for radar operations, and supporting facilities and infrastructure. The Secretary of the Air Force approved Clear Space Force Station, formerly known as Clear Air Force Station, AK as the LRDR site. The United States Space Force (USSF) Space Operations Command is the designated Lead Major Command. The initial fielding of LRDR was completed on December 6, 2021. In cooperation with the Northern Command, the Space Command, and the USSF, an incremental fielding approach is being taken. The early use fielding of the LRDR SDA capability is planned for early FY 2024. Fielding of the LRDR Increment 6B.1 capability will occur when LRDR is added to the Missile Defense System Operational Capability Baseline (OCB), currently planned for 1Q FY 2025, delayed by the replanning of formal ground testing of the final LRDR Increment 6B.1 software. Operational Acceptance (OA) by the USSF is planned for 2Q FY 2025 following completion of LRDR Increment 6B.1 fielding and Flight Test Other (FTX)-26. Completion of the LRDR System Transition and Transfer follows OA and is planned for 4Q FY 2025.

The LRDR Program Element supports the fielding of the LRDR capabilities described below:

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- The LRDR capability that will be fielded when LRDR is added to the Missile Defense System Increment 6B.1 OCB includes increased Missile Defense System raid handling capability, conventional and advanced discrimination capabilities, implementation of mitigation techniques in denied environments, Missile Defense System integration and remote ops via C2BMC, including cyber protection/interoperability, autonomous and cued acquisition capabilities, initial sensor bias reporting, inherent SDA capability, and Electronic Protection (EP) capabilities. Operational fielding of the LRDR capability will be completed when added to the OCB in FY 2024. As stated previously, an incremental fielding approach is being taken to field the SDA capability in advance of the full Missile Defense System capability.

- The LRDR capability that will be fielded with the Missile Defense System Increment 6C/7 includes software upgrades to LRDR to improve bias monitoring and reporting, increased discrimination capability that is expanded to a broader spectrum of threats and Resident Space Object scenes, increased support to the SDA/SOI mission with additional reporting, expanded threat loading and threat type including addition of hypersonic threat requirements, cybersecurity upgrades, reliability upgrades, cost reduction initiatives to reduce life cycle operating costs, and characterization testing and improvements to EP capability. Operational fielding of the LRDR Increment 6C/7 capability will be completed when added to the OCB in FY 2026.

- The LRDR capability that will be fielded with the Missile Defense System Increment 10 includes software upgrades to LRDR to improve capabilities against advanced threats and includes interface modifications to synchronize and verify requirements with the Next Generation Interceptor. Operational fielding of the LRDR Increment 10 capability will be completed when added to the OCB in FY 2028.

B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	75.120	103.517	100.114	-	100.114
Current President's Budget	65.991	103.517	100.882	-	100.882
Total Adjustments	-9.129	0.000	0.768	-	0.768
• 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	-1.486	0.000			
• Other Adjustment	-7.643	0.000	0.768	-	0.768

Change Summary Explanation

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Missile Defense Agency										Date: March 2024		
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 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
MD96: Long Range Discrim Radar (LRDR)	1,239.462	63.263	99.837	96.998	-	96.998	60.874	53.689	61.559	69.364	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

N/A

A. Mission Description and Budget Item Justification

The LRDR program supports and contributes to the Missile Defense Agency (MDA) mission of developing and deploying a layered Missile Defense System to defend the homeland from missile attacks of all ranges, in all phases of flight by providing persistent long-range midcourse discrimination, precision tracking and hit assessment as an element of the Missile Defense System Homeland Defense Capability. The LRDR program also supports the Space Domain Awareness (SDA) and Space Object Identification (SOI) mission area.

The LRDR Program Element includes the requirements to design, develop, integrate, deliver, field, and sustain the LRDR. The LRDR operates in the S-band frequency with a scalable and open systems architecture to mitigate evolving threats and integrates into the Missile Defense System through the Command and Control, Battle Management, and Communications (C2BMC) system. This Program Element includes Missile Defense System threat discrimination improvements to enhance effectiveness against the evolving threat. The result will be a Missile Defense System architecture more capable of discriminating and interpreting re-entry vehicles with a higher degree of confidence to improve Warfighter engagement doctrine, and conserve Ground Based Interceptor inventory. The LRDR is comprised of an equipment shelter, two radar array faces, a mission control facility for radar operations, and supporting facilities and infrastructure. The Secretary of the Air Force approved Clear Space Force Station (CSFS), formerly known as Clear Air Force Station, AK as the LRDR site. The United States Space Force (USSF) Space Operations Command is the designated Lead Major Command. The initial fielding of LRDR was completed on December 6, 2021. In cooperation with the Northern Command (NORTHCOM), the Space Command (SPACECOM), and the USSF, an incremental fielding approach is being taken. The early use fielding of the LRDR SDA capability is planned for early FY 2024. Fielding of the LRDR Increment 6B.1 capability will occur when LRDR is added to the Missile Defense System Operational Capability Baseline (OCB), currently planned for 1Q FY 2025, delayed by the replanning of formal ground testing of the final LRDR Increment 6B.1 software. Operational Acceptance (OA) by the USSF is planned for 2Q FY 2025 following completion of LRDR Increment 6B.1 fielding and Flight Test Other (FTX)-26. Completion of the LRDR System Transition and Transfer follows OA and is planned for 4Q FY 2025.

The LRDR Program Element supports the fielding of the LRDR capabilities described below:

- The LRDR capability that will be fielded when LRDR is added to the Missile Defense System Increment 6B.1 OCB includes increased Missile Defense System raid handling capability, conventional and advanced discrimination capabilities, implementation of mitigation techniques in denied environments, Missile Defense System integration and remote ops via C2BMC, including cyber protection/interoperability, autonomous and cued acquisition capabilities, initial sensor bias reporting, inherent

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Missile Defense Agency	Date: March 2024
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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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SDA capability, and Electronic Protection (EP) capabilities. Operational fielding of the LRDR capability will be completed when added to the OCB in FY 2024. As stated previously, an incremental fielding approach is being taken to field the SDA capability in advance of the full Missile Defense System capability.

- The LRDR capability that will be fielded with the Missile Defense System Increment 6C/7 includes software upgrades to LRDR to improve bias monitoring and reporting, increased discrimination capability that is expanded to a broader spectrum of threats and Resident Space Object scenes, increased support to the SDA/SOI mission with additional reporting, expanded threat loading and threat type including addition of hypersonic threat requirements, cybersecurity upgrades, reliability upgrades, cost reduction initiatives to reduce life cycle operating costs, and characterization testing and improvements to EP capability. Operational fielding of the LRDR Increment 6C/7 capability will be completed when added to the OCB in FY 2026.

- The LRDR capability that will be fielded with the Missile Defense System Increment 10 includes software upgrades to LRDR to improve capabilities against advanced threats and includes interface modifications to synchronize and verify requirements with the Next Generation Interceptor. Operational fielding of the LRDR Increment 10 capability will be completed when added to the OCB in FY 2028.

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

	FY 2023	FY 2024	FY 2025
<p>Title: Long Range Discrimination Radar (LRDR)</p> <p align="right">Articles:</p> <p>Description: The LRDR program includes requirement development activities associated with systems engineering, software development, discrimination improvements, design reviews, testing, and modeling and simulation 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 Increment 6B.1 and establish the installation verification and validation lab for testing of operational software. The program includes purchasing, manufacturing, integrating and testing of radar materials. This program will also establish the operational baseline, initiate radar operations and communication, and initiate sustainment operations. The program includes logistics management, reliability, availability, maintainability efforts, data management, and operations support for the LRDR program office. This project also includes Missile Defense System Increment 6C/7 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, including hypersonic missile threats, increase support to SDA and SOI, updates to current cybersecurity requirements, and implement cost reduction initiatives to reduce life cycle operating costs. This project also includes Missile Defense System Increment 10 software upgrades to LRDR to improve capabilities against advanced threats, interface modifications to synchronize and verify requirements with the Next Generation Interceptor, and post Transition and Transfer radar sustainment costs.</p> <p>Specific and/or unique accomplishments to each FY are as follows:</p> <p>FY 2024 Plans:</p>	63.263	99.837	96.998
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Exhibit R-2A, RDT&E Project Justification: PB 2025 Missile Defense Agency		Date: March 2024
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)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025
<ul style="list-style-type: none"> - Complete demobilization of Temporary Workforce Camp at CSFS, AK - Complete Fielding of SDA Early Use capability and Increment 6B.1 capability - Receive final builds of Increment 6C/7 software - Initiate Increment 6C/7 ground testing - Complete Interim Contractor Support phase 2 - Initiate post-transfer development and Operations and Sustainment efforts - Continue efforts to achieve OA by USSF by FY 2025 - Continue closeout activities for Transition and Transfer of LRDR to the USSF - Initiate LRDR development of Increment 10 capability <p>FY 2025 Plans:</p> <ul style="list-style-type: none"> - Achieve OA - Complete Transition and Transfer to USSF - Continue Increment 6C/7 Ground Testing - Continue Increment 10 capability development - Continue providing Interim Contractor Support (Phase 3) and necessary forward engineering to support CSFS <p>FY 2024 to FY 2025 Increase/Decrease Statement: N/A</p>			
Accomplishments/Planned Programs Subtotals	63.263	99.837	96.998

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0208866C MD11: Missile Defense System Radars Program, Operations and Maintenance	203.624	227.768	254.680	-	254.680	276.039	283.073	248.353	254.384	Continuing	Continuing
• 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
• 0603896C: Ballistic Missile Defense Command and	587.689	554.201	569.662	-	569.662	570.632	587.929	618.050	651.885	Continuing	Continuing

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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)

<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>
<i>Control, Battle Management & Communication</i>											
• 0603904C: <i>Missile</i>	47.629	50.549	54.525	-	54.525	56.851	58.115	59.600	61.362	Continuing	Continuing
<i>Defense Integration and Operations Center (MDIOC)</i>											
• 0604879C: <i>Ballistic Missile</i>	88.326	111.049	96.864	-	96.864	104.578	160.011	172.749	183.147	Continuing	Continuing
<i>Defense Sensor Test</i>											
• 31299903: <i>MILCON PLANNING and DESIGN</i>	47.063	1.035	4.745	-	4.745	0.600	0.600	0.600	0.600	0.000	55.243

Remarks

D. Acquisition Strategy

The approved LRDR acquisition strategy incorporates robust acquisition practices to ensure delivery of a best -value solution that meets mission performance requirements and reduces lifecycle costs. The 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 to balance acquisition costs and risks. Performance and cost incentives were included to motivate contractor performance. The radar prime contractor will deliver a complete technical data package, enabling the government to effectively and affordably sustain the system. MDA synchronized the radar development contract efforts with a simultaneous Military Construction effort executed through the US Army Corps of Engineers. The LRDR completed the initial fielding milestone on December 6, 2021, for Missile Defense System integration and testing of the Increment 6B.1 capability and an expected fielding of LRDR when it is added to the Missile Defense System OCB in FY 2024. The Acquisition Strategy was updated in FY 2021 to add the Increment 6C/7 capability. MDA awarded Lockheed Martin a cost-plus incentive fee contract on September 20, 2021, to develop and deliver the Increment 6/7 software upgrade. An LRDR Acquisition Strategy Decision Memorandum was signed in February 2023, granting authority to proceed with a sole source contract modification to Lockheed Martin to develop Increment 10 capability, which includes hardware and software sustainment. MDA approved the Justification and Approval in March 2023. The request for proposal was released to Lockheed Martin in May 2023.

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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 0604873C / Long Range Discrimination Radar (LRDR)				MD96 / Long Range Discrim Radar (LRDR)							
Product Development (\$ 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
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	13.803	4.417	Oct 2022	4.261	Oct 2023	3.971	Oct 2024	-		3.971	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Communications Integration	SS/CPIF	Lockheed Martin : AL, NJ	34.986	0.000		0.000		0.000		-		0.000	0.000	34.986	0.000
Long Range Discrimination Radar (LRDR) - Contract Support Services - No longer funded in this cost category	Various	Various : Various	14.348	0.000		0.000		0.000		-		0.000	0.000	14.348	0.000
Long Range Discrimination Radar (LRDR) - FFRDC/ UARC - No longer funded in this cost category	FFRDC	GTRI, JHU/APL, MITRE, MIT/LL : AL, GA, IL, MA, VA	9.754	0.000		0.000		0.000		-		0.000	0.000	9.754	0.000
Long Range Discrimination Radar (LRDR) - Hybrid Program Office -No longer funded in this cost category	MIPR	US Air Force : Various	0.692	0.000		0.000		0.000		-		0.000	0.000	0.692	0.000
Long Range Discrimination Radar (LRDR) - IV&V	MIPR	DOD - USA - COMBAT CAPABILITIES DEVELOPMENT COMMAND (CCDC) AVIATION AND MISSILE CENTER (AVMC) : AL	23.934	4.833	Dec 2022	2.750	Nov 2023	0.000		-		0.000	0.000	31.517	0.000
Long Range Discrimination Radar (LRDR) - LRDR Product Support (Various)	Various	Various : Various	0.000	0.000		0.000		5.703	Jul 2025	-		5.703	0.000	5.703	0.000

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

Product Development (\$ 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
Long Range Discrimination Radar (LRDR) - Prime Contractor - Increment 10	C/CPIF	LOCKHEED MARTIN CORPORATION : TBD	0.000	0.000		19.712	Mar 2024	28.009	Mar 2025	-		28.009	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Prime Contractor - Increment 6C/7	SS/CPIF	LOCKHEED MARTIN CORPORATION : Various	64.375	12.735	Feb 2023	36.028	Oct 2023	32.611	Oct 2024	-		32.611	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Prime Contractor -Increment 6B.1	C/FPIF	LOCKHEED MARTIN CORPORATION : NJ	857.857	2.500	Dec 2022	0.000		0.000		-		0.000	0.000	860.357	0.000
Long Range Discrimination Radar (LRDR) - Program Office - No longer funded in this cost category	Various	Various : Various	10.616	0.000		0.000		0.000		-		0.000	0.000	10.616	0.000
Long Range Discrimination Radar (LRDR) - Radar Operations, Sustainment, and Fuel - No longer funded in this cost category	MIPR	DOD - USSF - US SPACE FORCE (USSF) : AK	23.238	0.000		0.000		0.000		-		0.000	0.000	23.238	0.000
Long Range Discrimination Radar (LRDR) - Site Activation & Studies	MIPR	USACE : AL, AK	129.983	0.086	Jan 2023	0.000		0.000		-		0.000	0.000	130.069	0.000
Subtotal			1,208.696	24.571		62.751		70.294		-		70.294	Continuing	Continuing	N/A

Remarks
 Increase in LRDR Prime Contractor - Increment 10 from FY 2024 to FY 2025 provides a ramp-up of agile software builds that result in a final release for ground testing.

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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)							
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
Long Range Discrimination Radar (LRDR) - Contract Support Services	Various	Various : Various	2.250	2.603	Nov 2022	1.398	Oct 2023	2.404	Nov 2024	-		2.404	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Contract Support Services - Logistics	C/CPFF	VENTURI, INC. : AL	1.360	1.506	Nov 2022	1.271	Nov 2023	1.050	Nov 2024	-		1.050	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Contract Support Services - Systems Engineering	C/CPFF	PARSONS GOVERNMENT SERVICES INC. : CA	3.020	4.266	Nov 2022	2.694	Nov 2023	1.815	Nov 2024	-		1.815	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - FFRDC - MITRE	FFRDC	DOD - USA - COMMUNICATIONS ELECTRONICS COMMAND (CECOM) : VA	1.002	1.097	Jan 2023	0.766	Nov 2023	0.817	Nov 2024	-		0.817	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - High Altitude Electromagnetic Pulse (HEMP) Testing	MIPR	DOD - DEFENSE THREAT REDUCTION AGENCY (DTRA) : AK	0.000	1.558	May 2023	1.382	Sep 2024	0.000		-		0.000	0.000	2.940	0.000
Long Range Discrimination Radar (LRDR) - Prime Radar Integration	MIPR	DOD - USA - US ARMY CORPS OF ENGINEERS (USACE) : Various	0.000	4.867	Nov 2022	2.890	Nov 2023	0.000		-		0.000	0.000	7.757	0.000
Long Range Discrimination Radar (LRDR) - Radar / Software Sustainment	C/CPIF	LOCKHEED MARTIN CORPORATION : Various	0.000	0.000		0.000		18.691	Jan 2025	-		18.691	Continuing	Continuing	Continuing
Long Range Discrimination Radar (LRDR) - Radar Operations, Sustainment, and Fuel	MIPR	DOD - USSF - US SPACE FORCE (USSF) : AK	17.815	20.750	Mar 2023	25.674	Nov 2023	0.206	Nov 2024	-		0.206	Continuing	Continuing	Continuing

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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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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			
Long Range Discrimination Radar (LRDR) - UARC - GTRI	SS/CPFF	GEORGIA TECH APPLIED RESEARCH CORPORATION : Various	2.421	0.000		0.000		0.000		-		0.000	0.000	2.421	0.000
Long Range Discrimination Radar (LRDR) - UARC - JHU/APL	FFRDC	JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY LLC, THE : Various	2.898	2.045	Nov 2022	1.011	Nov 2023	1.721	Nov 2024	-		1.721	Continuing	Continuing	Continuing
Subtotal			30.766	38.692		37.086		26.704		-		26.704	Continuing	Continuing	N/A

Remarks
Decrease in LRDR Radar Operations, Sustainment, and Fuel from FY 2024 to FY 2025 reflects a transition of some costs to USSF.

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1,239.462	63.263	99.837	96.998	-	96.998	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

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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	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Long Range Discrimination Radar Capability	◆	◆	◆	◆																								
GTD-08a (N/I) (Missile Defense System Ground Test)	◆																											
FTX-26 (OT) (SN, OT Target Only Flight Test)				▲																								
FTX-49				▲																								
LRDR Space Domain Awareness Early Use Fielding						△																						
GTI-08b (N/I)							◆																					
GTI-08b Part 2							△																					
GTD-08b (N/I)							◆	◆																				
LR-08b (N/I)							△																					
LRDR Increment 6B.1 Fielding (LRDR added to Increment 6B.1 OCB)								△																				
GTI-13 Sprint 1 (N/I) (Missile Defense System Ground Test)											◆																	
Operational Acceptance (OA)											△																	
GTI-13 Sprint 2 (N/I) (Missile Defense System Ground Test)												◆																
LRDR Increment 6C/7 Fielding (LRDR added to Increment 6C/7 OCB)														△														
GTD-13 (N/I) (Missile Defense System Ground Test)															◆													
LR-13																◆												
GTI-14 Sprint 1 (N/I)																			◆									
GTI-14 (N/I) Sprint 2 (Missile Defense System Ground Test)																				◆								
GTD-14 (N/I) ((Missile Defense System Ground Test)																							◆					
LRDR Increment 10 Fielding (LRDR added to the Increment 10 OCB)																							△					
GTI-16 Sprint 1 (N/I)																								◆				
GTI-16 Sprint 2 (N/I)																											◆	
GTD-16 (N/I)																												◆

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

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Long Range Discrimination Radar Capability	1	2023	4	2028
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
LRDR Space Domain Awareness Early Use Fielding	2	2024	2	2024
GTI-08b (N/I)	3	2024	3	2024
GTI-08b Part 2	3	2024	3	2024
GTD-08b (N/I)	4	2024	1	2025
LR-08b (N/I)	4	2024	4	2024
LRDR Increment 6B.1 Fielding (LRDR added to Increment 6B.1 OCB)	1	2025	1	2025
GTI-13 Sprint 1 (N/I) (Missile Defense System Ground Test)	2	2025	2	2025
Operational Acceptance (OA)	2	2025	2	2025
GTI-13 Sprint 2 (N/I) (Missile Defense System Ground Test)	4	2025	4	2025
LRDR Increment 6C/7 Fielding (LRDR added to Increment 6C/7 OCB)	1	2026	1	2026
GTD-13 (N/I) (Missile Defense System Ground Test)	2	2026	2	2026
LR-13	3	2026	3	2026
GTI-14 Sprint 1 (N/I)	4	2026	4	2026
GTI-14 (N/I) Sprint 2 (Missile Defense System Ground Test)	3	2027	3	2027
GTD-14 (N/I) ((Missile Defense System Ground Test)	4	2027	4	2027
LRDR Increment 10 Fielding (LRDR added to the Increment 10 OCB)	1	2028	1	2028
GTI-16 Sprint 1 (N/I)	4	2028	4	2028
GTI-16 Sprint 2 (N/I)	3	2029	3	2029

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

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		
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 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	63.095	2.728	3.680	3.884	-	3.884	2.686	2.331	2.898	3.395	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
Title: Program Wide Support	2.728	3.680	3.884
Articles:	-	-	-
Description: 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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Exhibit R-2A, RDT&E Project Justification: PB 2025 Missile Defense Agency		Date: March 2024
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>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025
<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>FY 2024 Plans: - SEE ABOVE.</p> <p>FY 2025 Plans: - SEE ABOVE.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: N/A</p>			
Accomplishments/Planned Programs Subtotals	2.728	3.680	3.884

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

N/A

Remarks

D. Acquisition Strategy

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.

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

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 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	C/CPFF	Various : Multi: AL, CA, CO, VA	0.625	0.000		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 - 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			32.473	0.000		0.000		0.000		-		0.000	0.000	32.473	N/A

Remarks
N/A

Management Services (\$ 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	C/CPFF	CHENEGA : AL	30.622	2.728	Jan 2023	3.680	Jan 2024	3.884	Jan 2025	-		3.884	Continuing	Continuing	Continuing
Subtotal			30.622	2.728		3.680		3.884		-		3.884	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
Project Cost Totals	63.095	2.728	3.680	3.884	-	3.884	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Missile Defense Agency							Date: March 2024			
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>				
	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract	

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

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Missile Defense Agency		Date: March 2024
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	2023	4	2029