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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Missile Defense Agency **Date:** April 2022

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 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	315.191	49.261	50.594	50.269	-	50.269	51.849	55.960	56.488	54.980	Continuing	Continuing
MD03: <i>Joint Warfighter Support</i>	137.145	15.743	18.490	17.537	-	17.537	18.107	21.846	21.504	19.282	Continuing	Continuing
MT03: <i>Joint Warfighter Support Test</i>	157.800	31.549	29.990	30.748	-	30.748	31.753	32.146	32.789	33.445	Continuing	Continuing
MC03: <i>Cyber Operations</i>	0.448	0.000	0.155	0.159	-	0.159	0.164	0.168	0.171	0.174	Continuing	Continuing
MD40: <i>Program-Wide Support</i>	19.798	1.969	1.959	1.825	-	1.825	1.825	1.800	2.024	2.079	Continuing	Continuing

Program MDAP/MAIS Code: 362

Note

N/A

A. Mission Description and Budget Item Justification

The Joint Warfighter Support Program (JWSP) is the Missile Defense Agency's (MDA's) primary means for providing direct technical support to Combatant Commands (CCMDs), the Military Services and the Joint Staff on Missile Defense System (MDS) development, testing, and operational support, to include Real World testing and validation of the warfighter's operational Common Integration Broadcast (CIB). It enables delivery of MDS capabilities to Warfighters and ensures their participation in the identification and development of new Missile Defense (MD) capabilities via the Warfighter Involvement Process (WIP). The JWSP allows the Warfighter and Missile Defense Agency to work together to identify gaps, seams, and needs in warfighting capability and enhance MDS attributes by submitting modification and fielding requests. It also provides 24 hours a day, 7 days a week, 365 days a year MD operational support to Warfighters worldwide, to include global system verification and validation over the operational Common Integrated Broadcast. The program enables rapid response to Warfighter Requests for Information (RFIs) and Requests for Analyses (RFAs), which are especially critical to mission success in protecting U.S. Forces and other defended assets during Real World threat events. The program supports improving products delivered to Warfighters through technical reviews and technical analyses supporting strategic and regional MD planning, development of shot doctrine and MD design. The JWSP also enables the inclusion of both CCMD and MDA MD objectives in CCMD/Joint Staff-sponsored wargames and exercises, which are used to sharpen and enhance joint Missile Defense (MD) warfighting skills.

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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 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	49.560	50.594	0.000	-	0.000
Current President's Budget	49.261	50.594	50.269	-	50.269
Total Adjustments	-0.299	0.000	50.269	-	50.269
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.299	0.000			
• Missile Defeat and Defense Enhancement	0.000	0.000	0.000	-	0.000
• Other Adjustment	0.000	0.000	50.269	-	50.269

Change Summary Explanation

FY 2023 funding increase reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
MD03: <i>Joint Warfighter Support</i>	137.145	15.743	18.490	17.537	-	17.537	18.107	21.846	21.504	19.282	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

N/A

A. Mission Description and Budget Item Justification

There are six primary functions in Joint Warfighter Support (MD03):

- (1) Missile Defense Operations Support
- (2) Combatant Command Integration
- (3) Military Service Integration
- (4) Operational MDS Verification and Validation
- (5) Warfighter Training and Education Support
- (6) Joint Staff Integration

Detailed descriptions and accomplishments are provided in section B. Accomplishments/Planned Program

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

	FY 2021	FY 2022	FY 2023
Title: Strategic Warfighter Integration	15.743	18.490	17.537
Articles:	-	-	-
Description: (1) Missile Defense Operations Support:			
- Manage and operate the MDA Operations Support Center (OSC) 24 hours a day, 7 days a week, 365 days a year and two MDA Operations Centers (MOCs) in Virginia and Alabama for daily execution of scheduled MDS activities; and prepare and transmit Logistic Reports.			
- Manage and execute the MDS Asset Management (BAM) process of planning, coordinating, scheduling and executing access to operational and Research, Development, Test and Evaluation (RDT&E) assets operated by MDA and Warfighters dispersed globally with differing missions and competing priorities to facilitate assets in support of Warfighter BMD; Missile Warning/Space Surveillance (MW/SS) operations; MDA Research, Development, Test and Evaluation (RDT&E), training and sustainment activities.			
- Lead the MDA Operations Support Planning Team (OSPT), an MDA-wide task force supporting Warfighters, Services and the Joint Staff to address real-world contingencies and crisis events.			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency		Date: April 2022
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
<ul style="list-style-type: none"> - Develop MDS Annual Plan and MDS Operating Schedule facilitating key stakeholder coordination and maximizing operational availability of the MDS. - Develop and maintain the Integrated Scheduling Tool. - Facilitate major software/hardware additions to the Operational Capability Baseline for homeland/regional defenses. - Develop and maintain the MDS Operational Readiness Reporting System application to collect and report MDS operational availability and readiness data through the network-based tool to distribute data to Office of the Secretary of Defense (OSD), CCMDs, Joint Staff, Military Services, and MDS Operators. - Provide certification training to Ballistic Missile Defense Systems (BMDS) watch officers (BWO), BMDS Safety Officers (BSO), and other Operations Support Center staff. <p>(2) Combatant Command Integration (United States Strategic Command (USSTRATCOM), United States Northern Command (USNORTHCOM), United States Central Command (USCENTCOM), United States European Command (USEUCOM), United States Indo-Pacific Command (USINDOPACOM), and United States Space Command (USSPACECOM):</p> <ul style="list-style-type: none"> - Support the Warfighter Involvement Process (WIP) and other MDA Warfighter engagement efforts by assisting Warfighters in their update to the annual MDS Prioritized Capabilities List (PCL) and Modification and Fielding Request List (MFRL). - Aid CCMD participation in missile defense capability definition, design, development, integration, and delivery processes through the WIP to synchronize capability delivery with operational readiness and acceptance. - Support Joint Functional Component Command Integrated Missile Defense (JFCC IMD) integration by participating in the Warfighter Forum (WFF) a multi-lateral information and decision event to address CCMD, Service and Department of Defense (DoD) MDS equities. - Assist USNORTHCOM in broadening homeland defense planning to address the full range of USNORTHCOM threats by conducting the Homeland Defense Architecture Working Group (HDAWG) and Shot Management Analysis Cell (SMAC). - Prepare MDA senior leadership for engagements with CCMDs. - Interface with CCMDs on MD operational issues by providing planning and analysis support and translating warfighter responses to MDA issues. - Manage the Warfighter Requests for Information (RFIs); Requests for Analyses (RFAs); and Requests for Allied Participation in Tests (RFT) processes. <p>(3) Military Service Integration:</p> <ul style="list-style-type: none"> - Facilitate and coordinate Service Boards of Directors (BODs) on Lead Service MDS related equities, Program Objective Memorandum (POM) development and execution; element fielding, operations and maintenance, and the MDS capability delivery process. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency		Date: April 2022		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2021	FY 2022	FY 2023
<p>- Maintain daily, strategic-level interfaces with Military Services and Joint Staff plan for the delivery, fielding, and operation of respective Lead Service MDS capabilities via senior-level working groups, General Officer Air and Missile Defense and Space forums.</p> <p>- Support transition and transfer to the Military Services through participation in senior-level working groups, Joint Staff directorates, and facilitate General Officer forums.</p> <p>(4) Operational MDS Verification and Validation:</p> <p>- Provide 24 hours a day, 7 days a week, 365 days a year, global system verification and validation over the operational Common Integrated Broadcast, and Shared Early Warning System for MD early warning data.</p> <p>- Support Tactical Data Processor software development, MDA flight tests and other software development efforts using live real-world broadcasts of simulated missile threats.</p> <p>- Support Naval Board of Inspection and Survey (INSURV), Shipboard installation, Aegis On-Demand, Aegis program releases, US and Coalition operational readiness and BMD Exercise requirements to validate equipment, materiel, and tactical readiness while simultaneously providing deployment certification and crew operator qualification.</p> <p>- Verify operational readiness of both US and Coalition partners to detect a real-world launch of a ballistic threat.</p> <p>(5) Warfighter Training and Education Support:</p> <p>- Provide Missile Defense Space Warning tool (MDST) support to increase operator proficiency, competence, and confidence; provide initial qualification training; and ship certification for Aegis BMD crews.</p> <p>- Provide technical and programmatic updates for BMD Warfighter training; participates in MDS training and Education Working Group to coordinate MDS training issues with USSPACECOM and Joint Staff.</p> <p>- Support Fleet Synthetic and Aegis Operator Training to ensure operational readiness of Aegis as the first step in the kill chain for MD.</p> <p>- Provide Early Warning missile injects for MT03 war games and exercises and tailored support for other Joint Warfighter Support Test events (as listed in the Integrated Master Test Plan (IMTP) and R-4/4A schedule).</p> <p>(6) Joint Staff Integration:</p> <p>- Facilitate and coordinate all Joint Staff interactions with the MDA.</p> <p>- Maintain daily, strategic-level interfaces with the Joint Staff.</p> <p>Specific and/or unique accomplishments for each FY are as follows:</p> <p>FY 2022 Plans:</p>				

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
- SEE ABOVE			
FY 2023 Plans: - SEE ABOVE			
FY 2022 to FY 2023 Increase/Decrease Statement: N/A			
Accomplishments/Planned Programs Subtotals	15.743	18.490	17.537

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

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023 Base</u>	<u>FY 2023 OCO</u>	<u>FY 2023 Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• 0603882C: <i>Ballistic Missile Defense Midcourse Defense Segment</i>	1,195.853	724.028	667.524	-	667.524	870.817	802.617	781.973	765.733	Continuing	Continuing
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	259.605	254.962	231.134	-	231.134	250.028	274.705	276.254	257.575	Continuing	Continuing
• 0603890C: <i>BMD Enabling Programs</i>	607.167	623.644	591.847	-	591.847	613.589	625.761	635.633	640.374	Continuing	Continuing
• 0603892C: <i>AEGIS BMD</i>	861.809	639.549	600.072	-	600.072	658.798	574.014	570.018	580.496	Continuing	Continuing
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management & Communication</i>	639.027	564.946	589.374	-	589.374	575.883	588.824	612.853	605.801	Continuing	Continuing
• 0603904C: <i>Missile Defense Integration and Operations Center (MDIOC)</i>	54.026	52.403	49.367	-	49.367	51.744	56.502	57.833	59.006	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Integrated Research and Development for Enterprise Solutions (IRES) Contract and the Specialized Warfighter Development Contract are the major performing integrated contracts. The acquisition strategy for Strategic Warfighter Integration mission execution is to employ a contract to perform designated integration and sustainment tasks to conduct MDS Research, Development, Test and Evaluation (RDT&E). Strategic Warfighter Integration is operated by missile defense subject matter experts composed of Government, military, civilian personnel, Contract Support Services, and major defense contractors.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>
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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Subtotal				-		-		-		-		-	-	-	N/A

Remarks
N/A

Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Strategic Warfighter Integration - Strategic Warfighter Integration - HR A&AS	C/CPFF	LSINC Corp : Colorado Springs	0.821	0.046	Dec 2020	0.000		0.000		-		0.000	0.000	0.867	0.000
Strategic Warfighter Integration - Strategic Warfighter Integration - Administrative A&AS	C/CPFF	Yorktown : Colorado Springs	1.972	0.000		0.000		0.000		-		0.000	0.000	1.972	0.000
Strategic Warfighter Integration - Strategic Warfighter Integration - Civilian Salaries/ Operations Sustainment	Allot	MDA : Colorado Springs/Huntsville, NCR	42.609	5.203	Oct 2020	5.190	Oct 2021	5.412	Oct 2022	-		5.412	Continuing	Continuing	Continuing
Strategic Warfighter Integration - Strategic Warfighter Integration - Current Operations	C/CPAF	Jacobs Technology/ IRES : Colorado Springs	26.621	1.155	Nov 2020	1.322	Dec 2021	1.248	Nov 2022	-		1.248	Continuing	Continuing	Continuing
Strategic Warfighter Integration - Strategic Warfighter Integration - IT Wireless Services (JRDC/ IRES)	C/CPAF	Jacobs Technology/ IRES : Colorado Springs, Huntsville	4.871	0.814	Jan 2021	1.750	Jan 2022	0.596	Jan 2023	-		0.596	Continuing	Continuing	Continuing
Strategic Warfighter Integration - Strategic	C/CPAF	Northrop Grumman/ SWDC : Colorado Springs	26.757	3.223	Nov 2020	4.337	Nov 2021	4.149	Nov 2022	-		4.149	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>
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Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Warfighter Integration - MDST															
Strategic Warfighter Integration - Strategic Warfighter Integration - Travel and Training	Allot	MDA : Colorado Springs, Huntsville, NCR	1.835	0.038	Oct 2020	0.119	Oct 2021	0.359	Nov 2022	-		0.359	Continuing	Continuing	Continuing
Strategic Warfighter Integration - Strategic Warfighter Integration - Warfighter Support A&S	C/CPFF	STRATEGIC ALLIANCE SOLUTIONS LLC : Colorado Springs, Huntsville, NCR	31.659	5.264	Nov 2020	5.772	Nov 2021	5.773	Dec 2022	-		5.773	Continuing	Continuing	Continuing
Strategic Warfighter Integration - Test, Exercises and Wargames - A&S	C/CPFF	Millennium Eng & Int. : Colorado Springs/Huntsville	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	0.000
Subtotal			137.145	15.743		18.490		17.537		-		17.537	Continuing	Continuing	N/A

Remarks
N/A

Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Subtotal			-	-		-		-		-		-	-	-	N/A

Remarks
N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>
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Management Services (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Subtotal			-	-		-		-		-		-	-	-	N/A

Remarks
N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	137.145	15.743	18.490	17.537	-	17.537	Continuing	Continuing	N/A

Remarks
Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.
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 2023 Missile Defense Agency						Date: April 2022													
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>						Project (Number/Name) MD03 / <i>Joint Warfighter 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 2021		FY 2022		FY 2023		FY 2024		FY 2025		FY 2026		FY 2027	
Strategic Integration Wargame Events in support of MT03						◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency		Date: April 2022
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD03 / <i>Joint Warfighter Support</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Strategic Integration Wargame Events in support of MT03	1	2021	4	2027

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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
MT03: <i>Joint Warfighter Support Test</i>	157.800	31.549	29.990	30.748	-	30.748	31.753	32.146	32.789	33.445	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

N/A

A. Mission Description and Budget Item Justification

Joint Warfighter Support Test is to provide support to MDS Wargames and Exercises.

Wargames and Exercises:

- Support the Warfighter to plan and conduct worldwide wargames and exercises supporting MDS development and fielding.
- Enable the Warfighter to define, test, deploy, and employ new missile defense capabilities.
- Support Joint Functional Component Commander for Integrated Missile Defense (JFCC IMD) MDS Table Top Exercises (TTX) to facilitate the global missile defense capability and to refine the European capability concept of operations through low-fidelity demonstration Models & Simulation (M&S).
- Continue test planning for Wargames and Exercises.

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

	FY 2021	FY 2022	FY 2023
Title: Wargames and Exercises	26.545	26.755	27.092
Articles:	-	-	-
Description: The Missile Defense Agency provides operational-level interfaces to the Global Combatant Commands (GCCs) and ensures Warfighter participation to develop future missile defense capabilities.			
<ul style="list-style-type: none"> - Work with CCMDs on the inclusion of Allies and regional partners into MDA Ground and Flight tests and wargames and exercises simulations. - Support JFCC IMD and USEUCOM in the European Phased Adaptive Approach (EPAA) implementation process through the planning, testing, integration and execution of MDS wargames and exercises. - Support Joint Staff integration of MDA models into Tier I events through the Joint, Live Virtual Constructive (JLVC) campaign. - Work with Program Offices and the Warfighter; publish a Concept of Operations that will support future MDA Models and Simulation support to MDS wargames and exercises. - Coordinate and integrate CCMD requirements into the MDS Integrated Master Test Plan and Integrated Master Schedule. - Provide support to the development and update of Ballistic Missile Defense (BMD) portions of CCMD Operation Plans (OPLANS) and Contingency Plans (CONPLANS). 			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
<p>- Engage in MDA/GCC interface and synchronization of information regarding capabilities and security cooperation strategies.</p> <p>- Develop and provide wargames, exercises and Table Top Exercises (TTX) in support of CCMD-specific scenarios as listed in the R4-4A schedule for the USEUCOM, USINDOPACOM, USCENTCOM and USNORTHCOM/USSTRATCOM Geographic Combatant Commands.</p> <p>USEUCOM Engagement:</p> <ul style="list-style-type: none"> - Coordinate with USEUCOM for continued MDA support of key EPAA Approach milestones in order to provide a full range of MDS capabilities addressing ballistic missile threats to the European theater. - Work with USEUCOM to include NATO Allies and regional partners during MDA Ground tests, Flight tests, exercises and wargames in order to improve Allied - US MDS interoperability. - Coordinate with MDA program elements to facilitate rapid agency responses to USEUCOM requests for analysis and information. Provide reach-back support for the MDA Assistant to the MDA Director (ATD) and Liaison Officer (LNO) in USEUCOM for activities requiring visibility by the MDA Director and Director for Test. - Coordinate with MDA Global Deployment Program Office to plan and execute actions required for deployment of MDS assets in the USEUCOM theater of operations. <p>USCENTCOM Engagement:</p> <ul style="list-style-type: none"> - Promote CCMD leadership in developing a regional partner data sharing system supporting USCENTCOM regional Integrated Air and Missile Defense (IAMD) architecture development. - Coordinate with MDA program elements, assisting in planning and execution activities supporting USCENTCOM's regional partners. <p>USINDOPACOM Engagement:</p> <ul style="list-style-type: none"> - Assist USINDOPACOM leadership in broadening Phased Adaptive Approach planning to address a full range of threats and integration of allies into the MDS. - Support USINDOPACOM (Operations Directorate)J3 in efforts to promote the Aegis Ashore system. - Share operational information and knowledge and help allies develop common operational procedures. <p>FY 2022 Plans:</p> <ul style="list-style-type: none"> - SEE ABOVE. <p>FY 2023 Plans:</p> <ul style="list-style-type: none"> - SEE ABOVE. <p>FY 2022 to FY 2023 Increase/Decrease Statement:</p>			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023
N/A			
<p>Title: Program, Planning and Operations</p> <p align="right">Articles:</p> <p>Description: MDA provides and ensures Warfighter participation in the development of future missile defense capabilities and requirements. The key Warfighter interface activities include: - Provide resource management and administration of MT03 personnel and funding. - Manage and provide programmatic direction and oversight of the MDA Wargames and Exercise program. - Provide MDA Wargames and Exercises support to the Office of the Secretary of Defense (OSD), Military Service Components, the Joint Chiefs of Staff, the CCMD, the JFCC IMD, and international partners/allies to assist warfighter Tactics, Techniques, and Procedures (TTPs) validation and identify gaps that drive warfighter requirements. - Lead MDA planning, testing, integration and execution of all MDA-supported CCMD Wargames and Exercises.</p> <p>FY 2022 Plans: - SEE ABOVE</p> <p>FY 2023 Plans: -SEE ABOVE</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: - Increase from FY 2022 to FY 2023 is in accordance with the IMTP.</p>	5.004 -	3.235 -	3.656 -
Accomplishments/Planned Programs Subtotals	31.549	29.990	30.748

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

Remarks

D. Acquisition Strategy
In order to optimize the performance of the Missile Defense System, MDA leverages Defense Department executive agents as well as the MDA Integrated Research and Development for Enterprise Solutions (IRES) contract.

The executing agents utilize various contracting strategies in a flexible manner to maximize their contribution to the MDS. Products and Services are acquired by competitive means to the extent that is possible and practical.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency												Date: April 2022			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)						Project (Number/Name)					
0400 / 4				PE 0603898C / Ballistic Missile Defense Joint Warfighter Support						MT03 / Joint Warfighter Support Test					
Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
Wargames and Exercises - Test Support Sim Center	MIPR	Army Space and Missile Defense Command (USASMDC) : AL	0.000	0.000		0.000		0.750	Nov 2022	-		0.750	Continuing	Continuing	Continuing
Wargames and Exercises - Test Support Wargames	C/CPIF	JACOBS TECHNOLOGY INC. : Various	0.000	0.000		0.000		4.625	Nov 2022	-		4.625	Continuing	Continuing	Continuing
Wargames and Exercises - Wargames and Exercises - Combatant Commanders (COCOM)/Wargame Support	C/Various	IRES/MIPR : Jacobs / CO/TX/NH	100.102	24.148	Nov 2020	22.806	Nov 2021	21.717	Nov 2022	-		21.717	Continuing	Continuing	Continuing
Wargames and Exercises - Wargames and Exercises - Wargame Support	MIPR	SIM Center, SMDC/ LTPO, SPAWAR : CO/AL/TX/CA	27.743	2.397	Nov 2020	3.949	Nov 2021	0.000		-		0.000	0.000	34.089	0.000
Program, Planning and Operations - Civilian Salaries	Allot	MDA : Various	0.000	1.527	Nov 2020	1.396	Nov 2021	1.451	Nov 2022	-		1.451	Continuing	Continuing	Continuing
Program, Planning and Operations - Combatant Commanders (COCOM) Support A&AS	C/CPFF	TEAMS : Colorado Springs, Huntsville	6.454	2.385	Oct 2020	1.187	Nov 2021	1.555	Nov 2022	-		1.555	Continuing	Continuing	Continuing
Program, Planning and Operations - Government Travel & Training	Allot	MDA : Colorado Springs, Huntsville, NCR	2.788	0.000		0.000		0.000		-		0.000	0.000	2.788	0.000
Program, Planning and Operations - Operations Sustainment/Travel & Training	C/CPFF	MDA : Various	12.038	1.092	Oct 2020	0.652	Nov 2021	0.650	Oct 2022	-		0.650	Continuing	Continuing	Continuing
Program, Planning and Operations - Support to MDA Leadership A&AS	C/CPFF	TEAMS : Colorado Springs, Huntsville, NCR	8.675	0.000		0.000		0.000		-		0.000	0.000	8.675	0.000
Subtotal			157.800	31.549		29.990		30.748		-		30.748	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>
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Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			

Remarks
N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	157.800	31.549	29.990	30.748	-	30.748	Continuing	Continuing	N/A

Remarks
 Prior year funding was captured in the MD03 budget project.
 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 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>
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		Element Test Complete ◆		System Level Test Complete ●		Complete Activity ◆		Milestone Decision Complete ★		Significant Event Complete ▲					
		Element Test Planned ◇		System Level Test Planned ○		Planned Activity ◇		Milestone Decision Planned ☆		Significant Event Planned △					
		FY 2021		FY 2022		FY 2023		FY 2024		FY 2025		FY 2026		FY 2027	
(WG) DEMONSTRATION, TABLE-TOP EXERCISES & EXPERIMENTS 20	◆														
(EX) JOINT LIVE, VIRTUAL, AND CONSTRUCTIVE 2019/2020	◆														
(EX) KEEN SWORD 21	◆														
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 21	▲														
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 23	▲														
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 24	▲														
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 25	▲														
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 26	▲														
(EX) AUSTERE CHALLENGE 21	◆ ◆														
(EX) JOINT PROJECT OPTIC WINDMILL 2021	◆ ◆														
(EX) EUROPEAN AIR & MISSILE DEFENSE EXERCISE 21	◆ ◆														
(EX) AIR AND MISSILE DEFENSE EXERCISE 21	◆ ◆ ◆														
(WG) NIMBLE TITAN 22	◇ ◇ ◇ ◇ ◇ ◇ ◇														
(EX) EUROPEAN AIR & MISSILE DEFENSE EXERCISE 20	▲														
(EX) RESILIENT SHIELD 21	▲														
(EX) PACIFIC FURY 21	▲														
(EX) GLOBAL LIGHTNING 21	◆ ◆														
(EX) STEADFAST ARMOUR 21	◇ ◇														
(EX) EUROPEAN TEST BED 21	◇ ◇ ◇														
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 21	◇ ◇ ◇														
(WG) Missile Defense Wargame 22	◇ ◇ ◇ ◇ ◇ ◇														
(EX) Joint Live, Virtual, and Constructive 2021/2022	◇ ◇ ◇ ◇ ◇ ◇ ◇ ◇														
(EX) PACIFIC SENTRY 21	◇														
(EX) ASTRAL KNIGHT 21	△														

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</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 2021		FY 2022		FY 2023		FY 2024		FY 2025		FY 2026		FY 2027	
(WG) HUNTSVILLE WARGAMES 21		◇	◇											
(WG) Demonstration, Table-top Exercises & Experiments 21		◇	◇	◇										
(WG) SPACE & MISSILE DEFENSE SYMPOSIUM 21			△											
(EX) COMBINED COMMAND POST TRAINING 21-2			△											
(EX) VIGILANT SHIELD 22			◇	◇										
(EX) GLOBAL THUNDER 21			◇	◇										
(EX) KEEN EDGE 22			◇	◇	◇									
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 22				△										
(EX) JUNIPER COBRA 22				◇	◇									
(EX) AIR AND MISSILE DEFENSE EXERCISE 22				◇	◇	◇								
(EX) EAGLE RESOLVE 22					△									
(EX) RESILIENT SHIELD 22					△									
(EX) COMBINED COMMAND POST TRAINING 22-1					△									
(EX) PACIFIC FURY 22					△									
(EX) GLOBAL LIGHTNING 22					◇	◇								
(EX) STEADFAST ALLIANCE 22					◇	◇								
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 22					◇	◇	◇							
(EX) EUROPEAN TEST BED 22					◇	◇	◇							
(EX) ASTRAL KNIGHT 22						△								
(WG) Demonstration, Table-top Exercises & Experiments 22						◇	◇	◇						
(EX) PACIFIC SENTRY 22							△							
(EX) COMBINED COMMAND POST TRAINING 22-2							△							
(EX) VIGILANT SHIELD 23							◇	◇						
(EX) KEEN SWORD 23							◇	◇						

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</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 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	
(EX) GLOBAL RESPONSE EXERCISE 11			◇	◇																		
(EX) GLOBAL THUNDER 22			◇	◇																		
(EX) GLOBAL RESPONSE EXERCISE 12			◇	◇																		
(EX) Joint Project Optic Windmill 2023			◇	◇	◇																	
(EX) AIR AND MISSILE DEFENSE EXERCISE 23			◇	◇	◇																	
(WG) NIMBLE TITAN 24			◇	◇	◇	◇	◇	◇	◇	◇												
(EX) AUSTERE CHALLENGE 23			◇																			
(EX) RESILIENT SHIELD 23			△																			
(EX) COMBINED COMMAND POST TRAINING 23-1			△																			
(EX) PACIFIC FURY 23			△																			
(EX) STEADFAST ARMOUR 23			◇	◇																		
(EX) GLOBAL LIGHTNING 23			◇	◇																		
(EX) EUROPEAN TEST BED 23			◇	◇	◇																	
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 23			◇	◇	◇																	
(WG) Missile Defense Wargame 24			◇	◇	◇	◇	◇	◇														
(EX) Joint Live, Virtual, and Constructive 2023/2024			◇	◇	◇	◇	◇	◇	◇	◇												
(EX) EUROPEAN AIR & MISSILE DEFENSE EXERCISE 23			◇																			
(EX) ASTRAL KNIGHT 23			△																			
(WG) Huntsville Wargames 23			◇	◇																		
(WG) Demonstration, Table-top Exercises & Experiments 23			◇	◇	◇																	
(WG) Space & Missile Defense Symposium 23			△																			
(EX) PACIFIC SENTRY 23			△																			
(EX) COMBINED COMMAND POST TRAINING 23-2			△																			
(EX) GLOBAL THUNDER 23			◇	◇																		

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</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 2021			FY 2022			FY 2023			FY 2024			FY 2025			FY 2026			FY 2027		
(EX) VIGILANT SHIELD 24										◇	◇										
(EX) KEEN EDGE 24										◇	◇	◇									
(EX) JUNIPER COBRA 24											◇	◇									
(EX) AIR AND MISSILE DEFENSE EXERCISE 24											◇	◇	◇								
(EX) EAGLE RESOLVE 24												△									
(EX) RESILIENT SHIELD 24												△									
(EX) COMBINED COMMAND POST TRAINING 24-1												△									
(EX) PACIFIC FURY 24												△									
(EX) GLOBAL LIGHTNING 24												◇	◇								
(EX) STEADFAST ALLIANCE 24												◇	◇								
(EX) EUROPEAN TEST BED 24												◇	◇	◇							
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 24												◇	◇	◇							
(EX) ASTRAL KNIGHT 24													△								
(WG) DEMONSTRATION, TABLE-TOP EXERCISES & EXPERIMENTS 24												◇	◇	◇							
(WG) DEMONSTRATION, TABLE-TOP EXERCISES & EXPERIMENTS 25												◇	◇	◇							
(EX) PACIFIC SENTRY 24													△								
(EX) COMBINED COMMAND POST TRAINING 24-2													△								
(EX) GLOBAL THUNDER 24													◇	◇							
(EX) GLOBAL RESPONSE EXERCISE 13													◇	◇							
(EX) KEEN SWORD 25													◇	◇							
(EX) VIGILANT SHIELD 25													◇	◇							
(EX) AIR AND MISSILE DEFENSE EXERCISE 25													◇	◇	◇						
(WG) NIMBLE TITAN 26													◇	◇	◇	◇	◇	◇	◇	◇	
(EX) AUSTERE CHALLENGE 25														◇							

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency		Date: April 2022
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
(WG) DEMONSTRATION, TABLE-TOP EXERCISES & EXPERIMENTS 20	1	2021	1	2021
(EX) JOINT LIVE, VIRTUAL, AND CONSTRUCTIVE 2019/2020	1	2021	1	2021
(EX) KEEN SWORD 21	1	2021	1	2021
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 21	1	2021	1	2021
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 23	1	2021	1	2021
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 24	1	2021	1	2021
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 25	1	2021	1	2021
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 26	1	2021	1	2021
(EX) AUSTERE CHALLENGE 21	1	2021	2	2021
(EX) JOINT PROJECT OPTIC WINDMILL 2021	1	2021	2	2021
(EX) EUROPEAN AIR & MISSILE DEFENSE EXERCISE 21	1	2021	2	2021
(EX) AIR AND MISSILE DEFENSE EXERCISE 21	1	2021	3	2021
(WG) NIMBLE TITAN 22	1	2021	4	2022
(EX) EUROPEAN AIR & MISSILE DEFENSE EXERCISE 20	2	2021	2	2021
(EX) RESILIENT SHIELD 21	2	2021	2	2021
(EX) PACIFIC FURY 21	2	2021	2	2021
(EX) GLOBAL LIGHTNING 21	2	2021	3	2021
(EX) STEADFAST ARMOUR 21	2	2021	3	2021
(EX) EUROPEAN TEST BED 21	2	2021	4	2021
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 21	2	2021	4	2021
(WG) Missile Defense Wargame 22	2	2021	3	2022
(EX) Joint Live, Virtual, and Constructive 2021/2022	2	2021	1	2023

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
(EX) PACIFIC SENTRY 21	3	2021	3	2021
(EX) ASTRAL KNIGHT 21	3	2021	3	2021
(WG) HUNTSVILLE WARGAMES 21	3	2021	4	2021
(WG) Demonstration, Table-top Exercises & Experiments 21	3	2021	1	2022
(WG) SPACE & MISSILE DEFENSE SYMPOSIUM 21	4	2021	4	2021
(EX) COMBINED COMMAND POST TRAINING 21-2	4	2021	4	2021
(EX) VIGILANT SHIELD 22	4	2021	1	2022
(EX) GLOBAL THUNDER 21	4	2021	1	2022
(EX) KEEN EDGE 22	4	2021	2	2022
(EX) COMBINED FLYING TRAINING EVENT (CFTE) 22	1	2022	1	2022
(EX) JUNIPER COBRA 22	1	2022	2	2022
(EX) AIR AND MISSILE DEFENSE EXERCISE 22	1	2022	3	2022
(EX) EAGLE RESOLVE 22	2	2022	2	2022
(EX) RESILIENT SHIELD 22	2	2022	2	2022
(EX) COMBINED COMMAND POST TRAINING 22-1	2	2022	2	2022
(EX) PACIFIC FURY 22	2	2022	2	2022
(EX) GLOBAL LIGHTNING 22	2	2022	3	2022
(EX) STEADFAST ALLIANCE 22	2	2022	3	2022
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 22	2	2022	4	2022
(EX) EUROPEAN TEST BED 22	2	2022	4	2022
(EX) ASTRAL KNIGHT 22	3	2022	3	2022
(WG) Demonstration, Table-top Exercises & Experiments 22	3	2022	1	2023
(EX) PACIFIC SENTRY 22	4	2022	4	2022
(EX) COMBINED COMMAND POST TRAINING 22-2	4	2022	4	2022
(EX) VIGILANT SHIELD 23	4	2022	1	2023

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
(EX) KEEN SWORD 23	4	2022	1	2023
(EX) GLOBAL RESPONSE EXERCISE 11	4	2022	1	2023
(EX) GLOBAL THUNDER 22	4	2022	1	2023
(EX) GLOBAL RESPONSE EXERCISE 12	4	2022	1	2023
(EX) Joint Project Optic Windmill 2023	1	2023	3	2023
(EX) AIR AND MISSILE DEFENSE EXERCISE 23	1	2023	3	2023
(WG) NIMBLE TITAN 24	1	2023	4	2024
(EX) AUSTERE CHALLENGE 23	2	2023	2	2023
(EX) RESILIENT SHIELD 23	2	2023	2	2023
(EX) COMBINED COMMAND POST TRAINING 23-1	2	2023	2	2023
(EX) PACIFIC FURY 23	2	2023	2	2023
(EX) STEADFAST ARMOUR 23	2	2023	3	2023
(EX) GLOBAL LIGHTNING 23	2	2023	3	2023
(EX) EUROPEAN TEST BED 23	2	2023	4	2023
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 23	2	2023	4	2023
(WG) Missile Defense Wargame 24	2	2023	3	2024
(EX) Joint Live, Virtual, and Constructive 2023/2024	2	2023	1	2025
(EX) EUROPEAN AIR & MISSILE DEFENSE EXERCISE 23	3	2023	3	2023
(EX) ASTRAL KNIGHT 23	3	2023	3	2023
(WG) Huntsville Wargames 23	3	2023	4	2023
(WG) Demonstration, Table-top Exercises & Experiments 23	3	2023	1	2024
(WG) Space & Missile Defense Symposium 23	4	2023	4	2023
(EX) PACIFIC SENTRY 23	4	2023	4	2023
(EX) COMBINED COMMAND POST TRAINING 23-2	4	2023	4	2023
(EX) GLOBAL THUNDER 23	4	2023	1	2024

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
(EX) VIGILANT SHIELD 24	4	2023	1	2024
(EX) KEEN EDGE 24	4	2023	2	2024
(EX) JUNIPER COBRA 24	1	2024	2	2024
(EX) AIR AND MISSILE DEFENSE EXERCISE 24	1	2024	3	2024
(EX) EAGLE RESOLVE 24	2	2024	2	2024
(EX) RESILIENT SHIELD 24	2	2024	2	2024
(EX) COMBINED COMMAND POST TRAINING 24-1	2	2024	2	2024
(EX) PACIFIC FURY 24	2	2024	2	2024
(EX) GLOBAL LIGHTNING 24	2	2024	3	2024
(EX) STEADFAST ALLIANCE 24	2	2024	3	2024
(EX) EUROPEAN TEST BED 24	2	2024	4	2024
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 24	2	2024	4	2024
(EX) ASTRAL KNIGHT 24	3	2024	3	2024
(WG) DEMONSTRATION, TABLE-TOP EXERCISES & EXPERIMENTS 24	3	2024	1	2025
(WG) DEMONSTRATION, TABLE-TOP EXERCISES & EXPERIMENTS 25	3	2024	1	2025
(EX) PACIFIC SENTRY 24	4	2024	4	2024
(EX) COMBINED COMMAND POST TRAINING 24-2	4	2024	4	2024
(EX) GLOBAL THUNDER 24	4	2024	1	2025
(EX) GLOBAL RESPONSE EXERCISE 13	4	2024	1	2025
(EX) KEEN SWORD 25	4	2024	1	2025
(EX) VIGILANT SHIELD 25	4	2024	1	2025
(EX) AIR AND MISSILE DEFENSE EXERCISE 25	1	2025	3	2025
(WG) NIMBLE TITAN 26	1	2025	4	2026
(EX) AUUSTERE CHALLENGE 25	2	2025	2	2025
(EX) JOINT PROJECT OPTIC WINDMILL 2025	2	2025	2	2025

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
(EX) RESILIENT SHIELD 25	2	2025	2	2025
(EX) COMBINED COMMAND POST TRAINING 25-1	2	2025	2	2025
(EX) PACIFIC FURY 25	2	2025	2	2025
(EX) GLOBAL LIGHTNING 25	2	2025	3	2025
(EX) STEADFAST ARMOUR 25	2	2025	3	2025
(EX) EUROPEAN TEST BED 25	2	2025	4	2025
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 25	2	2025	4	2025
(WG) MISSILE DEFENSE WARGAME 26	2	2025	3	2026
(EX) JOINT LIVE, VIRTUAL, AND CONSTRUCTIVE 2025/2026	2	2025	1	2027
(EX) EUROPEAN AIR & MISSILE DEFENSE EXERCISE 25	3	2025	3	2025
(EX) ASTRAL KNIGHT 25	3	2025	3	2025
(WG) HUNTSVILLE WARGAMES 25	3	2025	4	2025
(WG) DEMONSTRATION, TABLE-TOP EXERCISES & EXPERIMENTS 26	3	2025	1	2026
(WG) SPACE & MISSILE DEFENSE SYMPOSIUM 25	4	2025	4	2025
(EX) PACIFIC SENTRY 25	4	2025	4	2025
(EX) COMBINED COMMAND POST TRAINING 25-2	4	2025	4	2025
(EX) GLOBAL RESPONSE EXERCISE 14	4	2025	1	2026
(EX) GLOBAL THUNDER 25	4	2025	1	2026
(EX) VIGILANT SHIELD 26	4	2025	1	2026
(EX) KEEN EDGE 26	4	2025	2	2026
(EX) JUNIPER COBRA 26	1	2026	2	2026
(EX) AIR AND MISSILE DEFENSE EXERCISE 26	1	2026	3	2026
(EX) COMBINED COMMAND POST TRAINING 26-1	2	2026	2	2026
(EX) EAGLE RESOLVE 26	2	2026	2	2026
(EX) PACIFIC FURY 26	2	2026	2	2026

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MT03 / <i>Joint Warfighter Support Test</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
(EX) RESILIENT SHIELD 26	2	2026	2	2026
(EX) GLOBAL LIGHTNING 26	2	2026	3	2026
(EX) STEADFAST ALLIANCE 26	2	2026	3	2026
(EX) EUROPEAN TEST BED 26	2	2026	4	2026
(EX) JOINT AIR AND MISSILE DEFENSE EXERCISE SERIES 26	2	2026	4	2026
(EX) ASTRAL KNIGHT 26	3	2026	3	2026
(EX) COMBINED COMMAND POST TRAINING 26-2	4	2026	4	2026
(EX) PACIFIC SENTRY 26	4	2026	4	2026
(EX) GLOBAL RESPONSE EXERCISE 15	4	2026	1	2027
(EX) GLOBAL THUNDER 26	4	2026	1	2027

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MC03 / <i>Cyber Operations</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
MC03: <i>Cyber Operations</i>	0.448	0.000	0.155	0.159	-	0.159	0.164	0.168	0.171	0.174	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

N/A

A. Mission Description and Budget Item Justification

This project verifies and validates that cybersecurity and/or cybersecurity-enabled products (firewalls, data/network encryption devices, routers, Intrusion Detection Systems, etc.) used within the MDA infrastructure have a current and Evaluated Assurance Level (EAL) certification and rating. They assure that validated IT products are listed on the DOD Approved Products List Integrated Tracking System (APLITS). There is an additional requirement to routinely identify findings and prepare a report with recommendations. This support is required in the IT product evaluation. Activities in the Project are necessary to comply with the Federal Information Systems Modernization Act of 2014 (FISMA).

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

	FY 2021	FY 2022	FY 2023
Title: Strategic Warfighter Integration Software Assurance Support	0.000	0.155	0.159
Articles:	-	-	-
<p>Description: Perform manual and automated software code analysis, using GFE tools (e.g. Fortify 360), to detect false positives, weaknesses, and vulnerabilities.</p> <ul style="list-style-type: none"> - Verify and validate cybersecurity and/or cybersecurity-enabled products (firewalls, data/network encryptors, routers, Intrusion Detection Systems, etc.) used within the MDA infrastructure have a current and Evaluated Assurance Level (EAL) certification and rating. Validate IT products are listed on the DoD APLITS. - Participate in meetings with customers to review software analysis findings and proposed courses of action for remediation. - Prepare a comprehensive report detailing the weaknesses and vulnerabilities found. Document the references to files and line numbers. - Maintain a record of all software code analysis documentation and organized in accordance with Government policy. <p>Specific and/or unique accomplishments to each FY are as follows:</p> <p>FY 2022 Plans: - SEE ABOVE</p> <p>FY 2023 Plans:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency		Date: April 2022		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MC03 / <i>Cyber Operations</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2021	FY 2022	FY 2023
- SEE ABOVE				
FY 2022 to FY 2023 Increase/Decrease Statement: N/A				
Accomplishments/Planned Programs Subtotals		0.000	0.155	0.159
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 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MC03 / <i>Cyber Operations</i>
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Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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			
Strategic Warfighter Integration Software Assurance Support - DW Cyber Support (ICVA)	C/CPFF	Decisive Analytics Corp. : COS	0.448	0.000		0.155	Jan 2022	0.159	Jan 2023	-		0.159	Continuing	Continuing	Continuing
Subtotal			0.448	0.000		0.155		0.159		-		0.159	Continuing	Continuing	N/A

Remarks
N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		0.448	0.000	0.155	0.159	-	0.159	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-4A, RDT&E Schedule Details: PB 2023 Missile Defense Agency		Date: April 2022
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MC03 / <i>Cyber Operations</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MC03 Cyber Operations	1	2021	4	2027

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD40 / <i>Program-Wide Support</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
MD40: <i>Program-Wide Support</i>	19.798	1.969	1.959	1.825	-	1.825	1.825	1.800	2.024	2.079	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

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

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 2021	FY 2022	FY 2023
Title: Program Wide Support	1.969	1.959	1.825
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 2023 Missile Defense Agency		Date: April 2022		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD40 / <i>Program-Wide Support</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2021	FY 2022	FY 2023
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.				
FY 2022 Plans: - SEE ABOVE				
FY 2023 Plans: - SEE ABOVE				
FY 2022 to FY 2023 Increase/Decrease Statement: N/A				
Accomplishments/Planned Programs Subtotals		1.969	1.959	1.825
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 2023 Missile Defense Agency **Date:** April 2022

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD40 / <i>Program-Wide Support</i>
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Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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 Operations Management	Various	Various Multi: AL, CO, CA, VA : Various	0.938	0.060	Jul 2021	0.073	Jul 2022	0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Civilian Salaries, Travel, Training	Various	MDA : Multi: AK,AL, CA, CO, VA	7.630	0.000		0.000		0.000		-		0.000	0.000	7.630	0.000
Program Wide Support - Agency Operations and Support Services	Reqn	DOD - DEFENSE ACQUISITION UNIVERSITY (DAU) : AL, CO, VA	8.277	1.909	Jul 2021	1.886	May 2022	1.825	Jan 2023	-		1.825	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services (Reqn)	Reqn	Various : Multi: AK, AL, CA, CO, VA	1.496	0.000		0.000		0.000		-		0.000	0.000	1.496	0.000
Program Wide Support - Prior year no longer funded in the FYDP	Various	Various : Various	1.457	0.000		0.000		0.000		-		0.000	0.000	1.457	0.000
Subtotal			19.798	1.969		1.959		1.825		-		1.825	Continuing	Continuing	N/A

Remarks
N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	19.798	1.969	1.959	1.825	-	1.825	Continuing	Continuing	N/A

Remarks
Award Dates 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 2023 Missile Defense Agency		Date: April 2022
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603898C / <i>Ballistic Missile Defense Joint Warfighter Support</i>	Project (Number/Name) MD40 / <i>Program-Wide Support</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MD40 Program-Wide Support	1	2021	4	2027