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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Missile Defense Agency										Date: May 2017		
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603904C / Missile Defense Integration and Operations Center (MDIOC)							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	323.288	46.191	54.750	53.265	-	53.265	54.505	57.588	58.574	59.738	Continuing	Continuing
MD22: Missile Defense Integration and Operations Center (MDIOC)	310.369	43.587	51.773	50.261	-	50.261	51.261	54.269	55.090	56.210	Continuing	Continuing
MC22: Cyber Operations	1.106	0.462	0.456	0.612	-	0.612	0.617	0.640	0.653	0.666	Continuing	Continuing
MD40: Program-Wide Support	11.813	2.142	2.521	2.392	-	2.392	2.627	2.679	2.831	2.862	Continuing	Continuing
Program MDAP/MAIS Code: 362												
Note In FY 2017, the Missile Defense Integration and Operations Center increase is for critical end-of-life infrastructure components.												
A. Mission Description and Budget Item Justification The Missile Defense Integration and Operations Center (MDIOC) is the Missile Defense Agency's (MDA) field operating activity in Colorado Springs, Colorado. It provides the necessary infrastructure and support services through a mission execution platform for MDA elements/components and designated Combatant Commanders' Ballistic Missile Defense System (BMDS) operations executing missions at the MDIOC. The Integration Center is the organization responsible for providing a single, integrated set of skilled personnel matrixed from across MDA to manage this mission. The MDIOC mission facilities consist of a highly secure research and development complex and a mission support module (area) located at Schriever Air Force Base, adjacent to North American Aerospace Defense Command (NORAD) and United States Northern Command (USNORTHCOM). The MDA Integration Center provides mission critical system technical capabilities and subject matter expertise in a dedicated and adaptable environment that enables developers, testers, and operators to evolve, assess and deliver the capabilities for layered missile defense execution for homeland defense and theater/regional support. The MDIOC interfaces with the Information Technology/Information Assurance Enterprise to provide high availability access to worldwide secure communications, network health and status monitoring, mission critical restoral capability, and technical expertise for all MDA directed activities and events. The MDIOC functions as the mission control for BMDS distributed ground tests and system wide flight tests enabling the mission and test directors to control both main and associated test operations using secure voice, test, and mission network hubs from the MDIOC. The MDIOC also functions as the only system-level integration and interoperability mission execution platform for BMDS fire control; and it provides the physical interface between the developers and the Combatant Command warfighters. MDIOC mission facilities contribute to the BMDS by directly supporting the concept of Concurrent Test, Training, and Operations (CTTO) for the BMDS by providing engineering integration, resource scheduling, configuration management, and implementation development support for MDA and BMDS-level test, training, and operational mission execution. MDIOC Major Program Goals:												

UNCLASSIFIED

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<div>-Provide the capabilities and services necessary to support engineering integration, resource scheduling for ground and flight tests, configuration management, and implementation development support of on-site activities</div> <div>-Ensure around the clock support and restoral of designated BMDS operational activities</div> <div>-Improve interface with designated Combatant Command missile defense activities; host/support the headquarters and operations center for United States Strategic Command</div> <div>Joint Functional Component Command - Integrated Missile Defense</div> <div>-Continue to achieve cost effectiveness and efficiencies by leveraging existing Missile Defense Integration and Operations Center infrastructure, services, processes, and expertise to support assigned missions</div> <div>-Maintain and improve the reliability, availability, and maintainability of MDIOC mission critical systems</div> <div>Program-Wide Support (PWS) consists of essential non-headquarters management efforts providing integrated and efficient support to MDA functions and activities across the entire BMDS.</div>						
B. Program Change Summary (\$ in Millions)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget		47.939	54.750	53.894	-	53.894
Current President's Budget		46.191	54.750	53.265	-	53.265
Total Adjustments		-1.748	0.000	-0.629	-	-0.629
• 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		-0.703	0.000			
• SBIR/STTR Transfer		-1.045	0.000			
• Other Adjustment		0.000	0.000	-0.629	-	-0.629
Change Summary Explanation						
N/A						

UNCLASSIFIED

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COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
MD22: Missile Defense Integration and Operations Center (MDIOC)	310.369	43.587	51.773	50.261	-	50.261	51.261	54.269	55.090	56.210	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2017, the Missile Defense Integration and Operations Center increase is a result of planning for projects deferred in FY 2016 and critical end-of-life infrastructure components.

A. Mission Description and Budget Item Justification

The Missile Defense Integration and Operations Center (MDIOC) sustains and operates a 24 hours a day, 365 days a year mission complex for critical research, development, testing, training, and operations for BMDS activities. The MDIOC supports the Ground-based Midcourse Missile Defense Mission Control Center Facility, as well as the Command, Control, Battle Management, and Communications (C2BMC) Integration and Test Centers and the C2BMC Experimentation Laboratories. It provides infrastructure support for the Satellite Tracking and Surveillance System's (STSS) Missile Defense Space Center (MDSC); and the Targets and Countermeasures' (TC) Joint Target Operations Center (JTOC). The MDIOC also provides developmental support to the Enterprise Sensors Laboratory (ESL) composed of a common satellite ground station and sensor netting test bed for designated Ballistic Missile Defense System (BMDS) elements. The MDIOC supports BMDS test events based on the Integrated Master Test Plan (IMTP.) It supports BMDS Critical Engagement Conditions testing and analysis through the operation of the Test Execution Control node for distributed BMDS ground tests. During system flight tests, the MDIOC provides infrastructure (power, Heating, Ventilation and Air Conditioning, and communications) support to the Flight Test Director and crew, and ensures the protection of facility and test assets throughout the test window. Further, the MDIOC provides the facilities that support operations of the Missile Defense Element, manned by the U.S. Army 100th Missile Defense Brigade, the United States Northern Command (USNORTHCOM) C2BMC Command and Control Center (CCC), the United States Strategic Command's (USSTRATCOM's) Joint Functional Component Command-Integrated Missile Defense (JFCC-IMD) and the Missile Defense Agency (MDA) Warfighter Support Center. In addition, the MDIOC supports the MDA Operations Support Center, which provides situational awareness of the health and status of the end-to-end BMDS, and provides network subject matter expertise and technical reach back for the program elements and Combatant Commanders. The MDIOC hosts BMDS wargames and exercises in support of the warfighter, and delivers requisite infrastructure to integrate the modeling and simulation assets that form system-level constructive simulations for full-envelope BMDS performance assessment, with surrogate capability for BMDS ground tests. The MDIOC maintains a technical repository of BMDS Implementation Architectures for real-time operations and configuration control; provides state change management and asset management technical support for the BMDS; and provides the technical environment for BMDS Watch Officers, Safety Officers, and Information Assurance Officers to perform their assigned duties. The MDIOC also supports the operations of the Joint Early Warning Laboratory (JEWL), which provides USSTRATCOM with quick response analyses of real-world launches, and rapid anomaly identification and resolution.

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

	FY 2016	FY 2017	FY 2018
Title: Infrastructure Systems and Support	18.233	20.880	20.656

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2017	FY 2018
<p align="right">Articles:</p> <p>Description: RECURRING:</p> <p>MDIOC Communications and Special Purpose Processing Node (SPPN):</p> <ul style="list-style-type: none"> - Establish a DoD compliant capable of meeting the unique network and data center services required to develop and deploy a layered BMDS to defend the United States. - Provide distinctive specifications and provisioning requirements associated with the MDA Research, Development, Test and Evaluation (RDT&E) Mission. - Provide capabilities that dynamically interconnect and integrate multiple RDT&E systems to large data sets and enable collaboration in near real-time with National Research Laboratories and Test Ranges; and Defense Industrial Base industry partners throughout the BMDS acquisition lifecycle. - Construct the SPPN infrastructure with routers, switches, firewalls, and intrusion detection systems that provide IT support to over 10,500 MDA classified/unclassified users worldwide. - Provide network operations and network monitoring; development of detailed solutions, designs, and plans; Disaster Recovery and Continuity of Operations rehearsals; internet access management; and web filtering. - Sustain core communications distribution services across the MDA Enterprise. - Plan, engineer, and implement sustainment projects for general IT services and business systems consistent with the IT architecture roadmap. - Acquire and distribute mission critical unclassified and secure communication capability to resident MDA elements/components and BMDS and Warfighter operational elements. - Provide computer hosting of specified threat models and support the integration of other threat tools as required. <p>End User Support:</p> <ul style="list-style-type: none"> - Sustain End User core service support 18 hours a day, 6 days a week for administrative and business information systems for unclassified and classified users - Monitor networks for user compliance with DoD policies and report incidents - Maintain Printing and Copy Services 			-	-	-

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2017	FY 2018
<div>- Sustain email services (Exchange servers, BlackBerry Enterprise Services servers and archiving storage area networks)</div> <div>- Sustain file services (file servers and storage area networks)</div> <div>- Maintain Directory Services (Active Directory and domain controller servers)</div> <div>- Maintain Authentication services (Public Key Infrastructure/Common Access Card)</div> <div>- Maintain current hardware and software licenses for IT operational systems</div> <div>- Maintain an Integrated Service Desk</div> <div>- Maintain IT life-cycle asset management of end user devices (desktops, laptops, monitors, printers, thin clients, and BlackBerrys)</div> <div>Hardware and Software Asset Management:</div> <div>- Manage government property and IT hardware and software in accordance with the Federal Acquisition Regulations (FAR)/DoD FAR Supplements (DFARs) to include accountability, reporting, warehouse management, asset transportation and excess asset management</div> <div>- Maintain an inventory of IT hardware and software assets connected or used in the ULAN, CLAN, SIPRNET and TS/SCI networks</div> <div>Cable Plant Cubicle Workstation:</div> <div>- Install facility connectivity cabling; provide trouble-shooting and repair</div> <div>- Install and reconfigure furniture and workstations</div> <div>Infrastructure Implementation Engineering:</div> <div>- Implement intelligence hardware/software updates as required to support the Operations Support Center</div> <div>- Provide MDIOC centric test event network related detailed designs in support of Test Events and real world operational events, provide implementation plans, update interface control documents and perform Change Control and Configuration Management services</div> <div>- Plan, design, test and operate the IT and communications technical architecture including Internet Protocol addressing schema, routing tables, switching policies, data paths, information assurance controls, fire wall configurations, application configurations, band width allocations for sub networks and eventual post event return to base line</div> <div>- Provide technical health and status monitoring, troubleshooting, and break/fix, IT/Communications support</div>					

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2017	FY 2018
for each of the event architectures including critical asset identification, monitoring, Quality Assurance/Quality Control (QA/QC) seals with configuration management and job control - Implement final Defense Information Systems Agency - Global Information Grid (DISA GIG) Mission Assurance node configuration Specific and/or unique accomplishments to a FY are as follows: FY 2016 Accomplishments: See Above FY 2017 Plans: The increase from FY 2016 to FY 2017 is to support the increase in cyber protection requirements FY 2018 Plans: See Above					
Title: Facilities and Maintenance Articles: Description: RECURRING: Host Tenant Support(Electrical, Gas, Sewer, Water, Steam, Chilled Water, Waste Water, Landscaping, Refuse Removal, and Communications Support): - Procure utility services through 50th Air Force Space Wing (Host Base) - Sustain utility infrastructure and delivery systems Environmental, Safety and Occupational Health (ESOH): - Maintain and updated the program accident prevention plan - Provide required industrial safety training to facility services personnel - Procure and distributed personal protection equipment for contracted activities - Ensure compliance with Hazardous Waste, Hazardous Material Recycling, and National Environmental Policy Act (NEPA) programs - Conduct recurring safety and environmental audits			13.101 -	14.935 -	14.708 -

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018
Facilities Operations and Sustainment: - Provide 24 hours a day, 365 days a year, facility maintenance break/fix response for all facility systems (electrical; Heating, Ventilation, and Air Conditioning; plumbing; locksmith) with a response time of 15 minutes after normal duty hours - Conduct preventative maintenance inspections (PMIs) for all building systems Facilities Engineering: - Conduct Management Process Facility Installation Standard Audits - Provide risk management analysis and mitigation plans - Maintain infrastructure drawings configuration management databases on a limited basis - Develop and document facility long range planning programming - Provide consulting services, preliminary designs and engineering rough order of magnitude estimates for required infrastructure buildout changes Missile Defense Integration and Operations Center (MDIOC) Operating Expenses: - Lease General Services Administration (GSA) vehicles and a commercial warehouse - Fund calibration of measuring and monitoring equipment - Fund repair of classified network switches Facility Services: - Provide custodial services for over 675,000 square feet of floor space in Buildings 720 and 730 - Provide limited Copy Center and Shuttle Services for over 2,000 personnel - Provide in/out processing and personnel moves Specific and/or unique accomplishments to a FY are as follows: FY 2016 Accomplishments: See Above FY 2017 Plans:				

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2017	FY 2018
The increase from FY 2016 to FY 2017 is a result of increased cost for host tenant support and increased rigor of configuration management documentation					
FY 2018 Plans: See Above					
Title: Engineering and Event Services			7.337	7.202	7.215
Articles:			-	-	-
Description: RECURRING: Mission Assurance and Event Execution Support - Implement baseline technical control for all Missile Defense Integration and Operations Center (MDIOC) mission critical subsystems and services - Execute MDIOC engineering management, quality assurance, configuration management and integration of all mission critical systems including: - Technical power distribution, Uninterruptable Power Supply Systems, major transformer substations, and circuit protection - Heating, Ventilation and Air Conditioning, chilled water and steam systems - Secure and non-secure voice communications for Ballistic Missile Defense Systems (BMDS); Operations, major tests, and general constituencies - Local and wide area secure data networking environments and network health and status tools 24 hours a day, 365 days a year - Ensure high availability of integrated MDIOC systems and BMDS Operations support 24 hours a day, 365 days a year - Implement 'last mile' integration for BMDS Operations, BMDS tests, wargames, exercises, training, and general admin services - Execute comprehensive configuration baseline integrity periods of non-disruption, periods of interest and work screening for all major tests and real world contingencies - Coordinate MDIOC process improvement investments across all mission areas - Execute aggressive, proactive and tailored risk management to ensure integrity and persistent connectivity and infrastructure support for all MDA missions executed from the MDIOC Mission Execution Platform to include BMDS system flight and ground test, space layer missile defense operations, modeling and simulation, wargames and exercises, and operations support to both MDA and Combatant Command operations work centers.					

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2017	FY 2018
<p>Technical Watch Support</p> <p>Provide on-site technical environment for BMDS Watch Officers, Safety Officers, and Information Assurance Officers to execute their duties 24 hours a day, 365 days a year to include coordinating, reporting, and escalating critical information and BMDS test and operation event information to all MDIOC technical and management staff to ensure rapid break/fix actions are executed.</p> <p>Program Quality Management, Risk Management, and Earned Value Management</p> <p>Provide engineering coordination, resource management, and integration of the dynamic spectrum of events across all MDIOC mission areas to include oversight of quality management, risk management, and earned value management.</p> <p>Event Architecture and Engineering Design:</p> <p>Coordinate design and implementation of technical architectures for all major MDIOC hosted BMDS tests, training and operations to include updating BMDS end-to-end Combatant Command deployed architecture as-built documentation reflecting new incremental content and deployments, and maintaining a technical repository of BMDS Implementation Architectures for real-time operation and configuration management.</p> <p>Specific and/or unique accomplishments to a FY are as follows:</p> <p>FY 2016 Accomplishments: See Above</p> <p>FY 2017 Plans: The decrease from FY 2016 to FY 2017 of the Engineering and Event Services is a result of increasing the integration rigor to mitigate mission assurance risk critical for test events within the Engineering and Event Services.</p> <p>FY 2018 Plans: See Above</p>					
<p>Title: Operations and Sustainment</p> <p align="right">Articles:</p> <p>Description: RECURRING:</p>			4.916 -	5.899 -	5.682 -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> - Fund Civilian and CSS positions supporting operations and sustainment of all Missile Defense Integration and Operations Center (MDIOC) activities contributing to the mission execution platform - Provide quality event planning, coordination, logistics, security access and host support for all MDIOC events and visitors - Deliver integrated service coordination for all MDIOC event and protocol support including management of the: - Event Registration Web site - Offsite event registration - Security processing, including clearance verification and badging - Arrangement/Coordination/Scheduling of bus transportation - Reservation, setup, and coordination of access for all primary shared MDIOC conference rooms - Operation of Audio Visual equipment during events - Preparation for and conduct of official ceremonies; coordination and hosting of Distinguished Visitor itineraries; and information disclosure approval coordination - Fund Training and Travel <p>Specific and/or unique accomplishments to a FY are as follows:</p> <p>FY 2016 Accomplishments: See Above</p> <p>FY 2017 Plans: See Above</p> <p>FY 2018 Plans: See Above</p>					
<p>Title: Infrastructure Systems Repair, Sustainment, and Critical Upgrades</p> <p align="right">Articles:</p> <p>Description: RECURRING:</p> <ul style="list-style-type: none"> - Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant) 			0.000 -	2.857 -	2.000 -

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018
- Fire Suppression System Compliance Project (two quadrants)			
<i>FY 2016 Accomplishments:</i> The decrease in FY2016 is due to the realignment of funds to other Department of Defense priorities <i>FY 2017 Plans:</i> The Infrastructure Systems Repair, Sustainment, and Critical Upgrades funding increase in FY 2017 is needed to accomplish scheduled Facility Sustainment, Restoration, and Modernization - Projects are listed in the R4 schedule <i>FY 2018 Plans:</i> The decrease from FY 2017 to FY 2018 in the Infrastructure Systems Repair, Sustainment, and Critical Upgrades aligns funding with the Missile Defense and Integration Facility Sustainment Plan and ensures the Facility maintains a Facility Condition Index that meets Department of Defense established goals. Projects are listed in the R4 schedule			
Accomplishments/Planned Programs Subtotals	43.587	51.773	50.261

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

<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u> <u>Base</u>	<u>FY 2018</u> <u>OCO</u>	<u>FY 2018</u> <u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603176C: <i>Advanced Concepts and Performance Assessment</i>	11.853	17.880	12.996	-	12.996	13.741	15.048	15.319	16.361	Continuing	Continuing
• 0603177C: <i>Discrimination Sensor Technology</i>	27.981	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• 0603178C: <i>Weapons Technology</i>	50.263	71.843	5.495	-	5.495	0.000	0.000	0.000	0.000	Continuing	Continuing
• 0603179C: <i>Advanced C4ISR</i>	9.661	3.626	0.000	-	0.000	0.000	0.000	0.000	0.000	0	13.287
• 0603180C: <i>Advanced Research</i>	16.987	27.733	20.184	-	20.184	20.695	21.555	21.936	22.361	Continuing	Continuing
• 0603294C: <i>Common Kill Vehicle Technology</i>	60.851	0.000	252.879	-	252.879	321.175	110.934	0.000	0.000	Continuing	Continuing
• 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	197.617	209.072	230.162	-	230.162	194.328	253.778	264.377	267.254	Continuing	Continuing
• 0603882C: <i>Ballistic Missile Defense Midcourse Defense Segment</i>	1,260.480	862.080	828.097	-	828.097	630.842	651.047	567.451	551.701	Continuing	Continuing
• 0603890C: <i>BMD Enabling Programs</i>	406.326	408.594	449.442	-	449.442	466.760	540.409	629.864	501.915	Continuing	Continuing

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C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost	
• 0603892C: AEGIS BMD	804.211	959.066	852.052	-	852.052	805.051	789.217	656.164	695.306	Continuing	Continuing	
• 0603893C: Space Tracking and Surveillance System	27.262	32.129	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• 0603895C: Ballistic Missile Defense System Space Programs	21.040	20.690	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
• 0603896C: Ballistic Missile Defense Command and Control, Battle Management & Communication	425.996	456.267	430.115	-	430.115	461.275	501.956	496.411	514.139	Continuing	Continuing	
• 0603898C: Ballistic Missile Defense Joint Warfighter Support	47.566	47.776	48.954	-	48.954	49.524	52.628	53.573	54.636	Continuing	Continuing	
• 0603907C: Sea Based X-Band Radar (SBX)	81.265	93.287	130.695	-	130.695	114.545	126.250	97.666	97.659	Continuing	Continuing	
• 0603913C: Israeli Cooperative Programs	267.595	103.835	105.354	-	105.354	108.002	109.742	111.901	114.219	Continuing	Continuing	
• 0603914C: Ballistic Missile Defense Test	290.267	293.441	305.791	-	305.791	295.042	351.626	336.137	334.678	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
The Joint National Integration Center Research and Development Contract / Integrated Research and Development for Enterprise Solutions Contract is the major performing integrated contract and is scheduled to be recompeted in FY 2017. The acquisition strategy for MDIOC mission execution is to employ a contract to perform designated integration and sustainment tasks to conduct BMDS Research, Development, Test and Evaluation (RDT&E). The MDIOC is operated by missile defense subject matter experts composed of Government, military, civilian personnel, MDIOC Contract Support Services, and major defense contractors.												
E. Performance Metrics												
N/A												

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017			
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Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Infrastructure Systems and Support - MDIOC IRES/ TBD	C/CPIF	MDIOC/IRES/TBD : Colorado Springs, CO	0.000	0.000		0.000		1.000	Jul 2018	-		1.000	Continuing	Continuing	Continuing
Infrastructure Systems and Support - MDIOC NG	C/CPAF	MDIOC/Northrup Grumman Mission Systems : Colorado Springs, CO	117.962	18.233	Nov 2015	20.880	Nov 2016	19.656	Jan 2018	-		19.656	Continuing	Continuing	Continuing
Facilities and Maintenance - MDIOC Custodial	C/FFP	MDIOC/Ability One : Colorado Springs, CO	1.161	1.330	Dec 2015	1.158	Oct 2016	1.182	Dec 2017	-		1.182	Continuing	Continuing	Continuing
Facilities and Maintenance - MDIOC GSA / Leases / Calibration	MIPR	Various (GSA, Warehouses) : Colorado Springs, CO	6.135	0.729	Nov 2015	0.617	Nov 2016	0.629	Oct 2017	-		0.629	Continuing	Continuing	Continuing
Facilities and Maintenance - MDIOC IRES/TBD	C/CPIF	MDIOC/IRES : Colorado Springs, CO	0.000	0.000		0.000		1.000	Jul 2018	-		1.000	Continuing	Continuing	Continuing
Facilities and Maintenance - MDIOC NG	C/CPAF	MDIOC/Northrup Grumman Mission Systems : Colorado Springs, CO	75.497	7.950	Nov 2015	10.052	Nov 2016	8.699	Nov 2017	-		8.699	Continuing	Continuing	Continuing
Facilities and Maintenance - MDIOC Utilities	MIPR	50th Space Wing : Schriever AFB, CO	14.542	3.092	Oct 2015	3.108	Oct 2016	3.198	Oct 2017	-		3.198	Continuing	Continuing	Continuing
Engineering and Event Services - MDIOC NG	C/CPAF	MDIOC/Northrup Grumman Mission Systems : Colorado Springs, CO	51.731	7.337	Oct 2015	7.202	Oct 2016	7.215	Nov 2017	-		7.215	Continuing	Continuing	Continuing
Operations and Sustainment - FFRDC	FFRDC	MDIOC : Colorado Springs, CO	2.167	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Operations and Sustainment - Operations & Sustainment	Allot	MDIOC : Colorado Springs, CO	18.001	2.716	Oct 2015	3.091	Oct 2016	3.000	Oct 2017	-		3.000	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017			
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603904C / Missile Defense Integration and Operations Center (MDIOC)				Project (Number/Name) MD22 / Missile Defense Integration and Operations Center (MDIOC)					
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Operations and Sustainment - Support Services	C/CPFF	MiDAESS/TEAMS Multi : Colorado Springs, CO	14.433	2.163	Nov 2015	2.719	Nov 2016	2.622	Nov 2017	-		2.622	Continuing	Continuing	Continuing
Operations and Sustainment - Travel and Training	Allot	MDIOC : Colorado Springs, CO	0.626	0.037	Oct 2015	0.089	Oct 2016	0.060	Nov 2017	-		0.060	Continuing	Continuing	Continuing
Infrastructure Systems Repair, Sustainment, and Critical Upgrades - MDIOC NG	C/CPAF	MDIOC/Northrop Grumman Mission Systems : Colorado Springs, CO	8.114	0.000		2.857	Dec 2016	2.000	Jan 2018	-		2.000	Continuing	Continuing	Continuing
Subtotal			310.369	43.587		51.773		50.261		-		50.261	-	-	-
Remarks															
Funds for utilities and base communications are specified in the Inter-service Support Agreement with the 50th Space Wing. In addition, the Missile Defense Integration and Operations Center (MDIOC) provides Technical Contract Support Services employees, for MDIOC operations and oversight of the Joint Research and Development Contractor (JRDC), as well as funding for JRDC work as required by the government.															
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Subtotal			-	-		-		-		-		-	-	-	-
Remarks															
N/A															
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Subtotal			-	-		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency													Date: May 2017		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>					Project (Number/Name) MD22 / <i>Missile Defense Integration and Operations Center (MDIOC)</i>					

Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Remarks N/A															

Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Subtotal			-	-		-		-		-		-	-	-	-
Remarks N/A															

	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	310.369	43.587		51.773		50.261		-		50.261	-	-	-
Remarks N/A													

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency														Date: May 2017					
Appropriation/Budget Activity				R-1 Program Element (Number/Name) PE 0603904C / Missile Defense Integration and Operations Center (MDIOC)								Project (Number/Name) MD22 / Missile Defense Integration and Operations Center (MDIOC)							
0400 / 4																			
Significant Event Complete ▲ Significant Event Planned △				Milestone Decision Complete ★ Milestone Decision Planned ☆				Element Test Complete ◆ Element Test Planned ◇				System Level Test Complete ● System Level Test Planned ○				Complete Activity ◆ Planned Activity ◇			
				FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022			
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2017)							◇	◇	◇	◇									
Replace/repair drainage/sewer system (Phase I -Building 720)							◇	◇	◇	◇									
Re-purpose basement space to accommodate IT and Infrastructure support personnel (Phase II)							◇	◇	◇	◇									
Fire Suppression System Compliance Project (two quadrants)(FY 2017)							◇	◇	◇										
Replace Heating, Ventilation, and Air Conditioning (HVAC) Chilled Water Pumps (North System)							◇	◇	◇										
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2018)										◇	◇	◇	◇						
Re-purpose basement space to accommodate IT and Infrastructure support personnel (Phase III)										◇	◇	◇	◇						
Electrical power distribution in two mission quadrants to replace- End-of-Life systems, increase reliability, improve power distribution efficiency, and redundancy to mission critical areas										◇	◇								
Fire Suppression System Compliance Project (two quadrants)(FY 2018)										◇	◇	◇							
Replace end-of-life Emergency Lighting Module (Building 730)										◇	◇								
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2019)											◇	◇	◇	◇					
Re-purpose basement space to accommodate IT and Infrastructure support personnel (Phase IV)											◇	◇	◇	◇					
Replace/repair drainage/sewer system (Phase III -Building 720)											◇	◇	◇	◇					
Fire Suppression System Compliance Project (two quadrants)(FY 2019)											◇	◇	◇						
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2020)														◇	◇	◇	◇		
Install Ambient Air Economizer (greening initiative)														◇	◇	◇	◇		
Replace Heating, Ventilation, and Air Conditioning (HVAC) Chilled Water Pumps (North and South Loops)														◇	◇	◇	◇		
Fire Suppression System Compliance Project (two quadrants)(FY 2020)														◇	◇	◇			

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency															Date: May 2017														
Appropriation/Budget Activity 0400 / 4										R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>										Project (Number/Name) MD22 / <i>Missile Defense Integration and Operations Center (MDIOC)</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 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022							
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2021)																				◇	◇	◇	◇						
Fire Suppression System Compliance Project (two quadrants)(FY 2021)																					◇	◇	◇						
Availability/Arc Flash/Short Circuit Coordination Study																					◇								

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Missile Defense Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>	Project (Number/Name) MD22 / <i>Missile Defense Integration and Operations Center (MDIOC)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2017)	1	2017	4	2017
Replace/repair drainage/sewer system (Phase I -Building 720)	1	2017	4	2017
Re-purpose basement space to accommodate IT and Infrastructure support personnel (Phase II)	1	2017	4	2017
Fire Suppression System Compliance Project (two quadrants)(FY 2017)	2	2017	4	2017
Replace Heating, Ventilation, and Air Conditioning (HVAC) Chilled Water Pumps (North System)	2	2017	4	2017
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2018)	1	2018	4	2018
Re-purpose basement space to accommodate IT and Infrastructure support personnel (Phase III)	1	2018	4	2018
Electrical power distribution in two mission quadrants to replace- End-of-Life systems, increase reliability, improve power distribution efficiency, and redundancy to mission critical areas	2	2018	3	2018
Fire Suppression System Compliance Project (two quadrants)(FY 2018)	2	2018	4	2018
Replace end-of-life Emergency Lighting Module (Building 730)	3	2018	4	2018
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2019)	1	2019	4	2019
Re-purpose basement space to accommodate IT and Infrastructure support personnel (Phase IV)	1	2019	4	2019
Replace/repair drainage/sewer system (Phase III -Building 720)	1	2019	4	2019

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Missile Defense Agency			Date: May 2017	
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603904C / Missile Defense Integration and Operations Center (MDIOC)		Project (Number/Name) MD22 / Missile Defense Integration and Operations Center (MDIOC)	
	Start		End	
Events	Quarter	Year	Quarter	Year
Fire Suppression System Compliance Project (two quadrants)(FY 2019)	2	2019	4	2019
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2020)	1	2020	4	2020
Install Ambient Air Economizer (greening initiative)	1	2020	4	2020
Replace Heating, Ventilation, and Air Conditioning (HVAC) Chilled Water Pumps (North and South Loops)	1	2020	4	2020
Fire Suppression System Compliance Project (two quadrants)(FY 2020)	2	2020	4	2020
Heating, Ventilation, and Air Conditioning end-of-life component replacement and capacity upgrade to improve mission assurance to critical mission areas within Building 720 (one quadrant)(FY 2021)	1	2021	4	2021
Fire Suppression System Compliance Project (two quadrants)(FY 2021)	2	2021	4	2021
Availability/Arc Flash/Short Circuit Coordination Study	3	2021	3	2021

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency										Date: May 2017		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603904C / Missile Defense Integration and Operations Center (MDIOC)				Project (Number/Name) MC22 / Cyber Operations			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
MC22: Cyber Operations	1.106	0.462	0.456	0.612	-	0.612	0.617	0.640	0.653	0.666	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note N/A												
A. Mission Description and Budget Item Justification The Missile Defense Integration and Operations Center (MDIOC) conducts Cyber Defensive Operations through Key Management Infrastructure and Information Assurance Training which interfaces with the Information Technology/Information Assurance Enterprise to provide secure communications, network health and status monitoring, mission critical restoral capability, and technical expertise.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2016	FY 2017	FY 2018	
Title: Cyber Defensive Operations Articles:									0.462	0.456	0.612	
									-	-	-	
Description: RECURRING: The Missile Defense Integration and Operations Center (MDIOC) conducts Defensive Cyber Operations in the following categories: Key Management Infrastructure - Interface with the Information Technology/Information Assurance Enterprise to provide for the generation, production, control and distribution, and training for utilizing the keying material used with the Agency's cryptographic devices. Information Assurance Training - Maintain an Information Assurance (IA) certified workforce through continuous IA training as required by DoD Directive 8570 Specific and/or unique accomplishments to a FY are as follows: FY 2016 Accomplishments: See Above FY 2017 Plans: See Above FY 2018 Plans:												

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency		Date: May 2017	
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>	Project (Number/Name) MC22 / <i>Cyber Operations</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
See Above. The increase from FY 2017 to FY 2018 in the Cyber Operations is due to the increase in mandates imposed by Congress to mitigate the cyber security threat to the Agency and DoD.			
Accomplishments/Planned Programs Subtotals		0.462	0.456
C. Other Program Funding Summary (\$ in Millions) N/A			
Remarks			
D. Acquisition Strategy N/A			
E. Performance Metrics N/A			

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017			
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>						Project (Number/Name) MC22 / <i>Cyber Operations</i>			
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Cyber Defensive Operations - Cyber Defensive Operations	C/CPAF	MDIOC/Northrop : Grumman Mission Systems Colorado Springs, CO	1.106	0.462	Nov 2015	0.456	Dec 2016	0.612	Jan 2018	-		0.612	Continuing	Continuing	Continuing
Subtotal			1.106	0.462		0.456		0.612		-		0.612	-	-	-
Remarks N/A															
Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Subtotal			-	-		-		-		-		-	-	-	-
Remarks N/A															
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			1.106	0.462		0.456		0.612		-		0.612	-	-	-
Remarks N/A															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency																Date: May 2017							
Appropriation/Budget Activity 0400 / 4								R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>								Project (Number/Name) MC22 / <i>Cyber Operations</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 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022			
MC22 Cyber Operations								◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇				

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Missile Defense Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>	Project (Number/Name) MC22 / <i>Cyber Operations</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MC22 Cyber Operations	1	2016	4	2020

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency										Date: May 2017		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>				Project (Number/Name) MD40 / <i>Program-Wide Support</i>			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
MD40: <i>Program-Wide Support</i>	11.813	2.142	2.521	2.392	-	2.392	2.627	2.679	2.831	2.862	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2016, FY 2017, and FY 2018 Program Wide Support reflects proportional changes as a result of budget changes to the Missile Defense Integration and Operations Center. Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests on the R-3

A. Mission Description and Budget Item Justification

PWS contains non-headquarters management costs in support of MDA functions and activities across the entire BMDS. It Includes Government Civilians, and Contract Support Services. This provides integrity and oversight of the BMDS as well as supports MDA in the development and evaluation of technologies that will respond to the changing threat. Additionally, PWS includes Global Deployment personnel and support performing deployment site preparation and activation and, provides facility capabilities for MDA Executing Agent locations. Other MDA wide costs includes: 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; data and unified communications support; supplies and maintenance; materiel and readiness and central property management of equipment; and similar operating expenses. PWS is allocated on a pro-rata basis and therefore, fluctuates by year based on the adjusted RDT&E profile (which excludes: 0305103C Cyber Security Initiative, 0603274C Special Programs, 0603913C Israeli Cooperative Program and 0901598C Management Headquarters).

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

	FY 2016	FY 2017	FY 2018
Title: Program Wide Support	2.142	2.521	2.392
Articles:	-	-	-
Description: N/A			
FY 2016 Accomplishments: N/A			
FY 2017 Plans: N/A			
FY 2018 Plans: N/A			
Accomplishments/Planned Programs Subtotals	2.142	2.521	2.392

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Missile Defense Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>	Project (Number/Name) MD40 / <i>Program-Wide Support</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy N/A		
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Missile Defense Agency												Date: May 2017			
Appropriation/Budget Activity 0400 / 4						R-1 Program Element (Number/Name) PE 0603904C / Missile Defense Integration and Operations Center (MDIOC)				Project (Number/Name) MD40 / Program-Wide Support					
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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, Operations, and Maintenance	MIPR	Various : Multi: AK, AL, CA, CO, VA	5.301	0.010		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations Management	Allot	Various : Multi: AL, CA, CO, VA	0.314	0.000		0.178	Jul 2017	0.048	Jul 2018	-		0.048	0.241	0.781	0
Program Wide Support - Agency Operations and Support Services	Reqn	Various : Multi: AK, AL, CA, CO, VA	6.198	2.132	Dec 2015	2.145	Nov 2016	2.344	Nov 2017	-		2.344	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services.	C/CPFF	Various : Alatec INC, AL, CO, VA	0.000	0.000		0.198	Aug 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Subtotal			11.813	2.142		2.521		2.392		-		2.392	-	-	-
Remarks N/A															
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			11.813	2.142		2.521		2.392		-		2.392	-	-	-
Remarks N/A															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency																	Date: May 2017							
Appropriation/Budget Activity 0400 / 4										R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>								Project (Number/Name) MD40 / <i>Program-Wide Support</i>						
Significant Event Complete ▲			Milestone Decision Complete ★			Element Test Complete ◆			System Level Test Complete ●			Complete Activity ◆												
Significant Event Planned △			Milestone Decision Planned ☆			Element Test Planned ◇			System Level Test Planned ○			Planned Activity ◇												
										FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022		
MD40 Program-Wide Support										◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Missile Defense Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603904C / <i>Missile Defense Integration and Operations Center (MDIOC)</i>	Project (Number/Name) MD40 / <i>Program-Wide Support</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MD40 Program-Wide Support	1	2016	4	2022