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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 0603914C / Ballistic Missile Defense Test
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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
Total Program Element	1,390.957	290.267	293.441	305.791	-	305.791	295.042	351.626	336.137	334.678	Continuing	Continuing
MD04: BMDs Test Development Program	-	0.000	0.000	0.000	-	0.000	0.000	17.500	28.900	22.600	0	69.000
MT04: BMDs Test Program	1,325.821	276.311	277.851	288.516	-	288.516	278.141	315.226	288.333	293.327	Continuing	Continuing
MC04: Cyber Operations	2.181	2.072	2.479	2.528	-	2.528	2.578	2.631	2.682	2.737	Continuing	Continuing
MD40: Program Wide Support	62.955	11.884	13.111	14.747	-	14.747	14.323	16.269	16.222	16.014	Continuing	Continuing

Program MDAP/MAIS Code: 362

Note

The increase from FY 2017 to FY 2018 is due to the addition of Integrated Master Test Plan flight test execution and logistics at Wake Island.

A. Mission Description and Budget Item Justification

MDA utilizes a disciplined system engineering process to develop and integrate the BMDs into an effective, layered defense against ballistic missiles of all ranges during all phases of flight. This process consists of the following steps: Plan, Define, Design, Build, Test and Verify, Assess, and Deliver BMDs Capability, followed by transfer of selected capabilities. The BMDs Test Program Element (PE) is responsible for testing that provides critical data to: determine validity of models and simulations used to verify and assess BMDs capabilities; validate that Elements and Components are properly designed, built, and integrated; and to provide confidence that the BMDs will perform as designed, and support system performance assessment for incremental capability delivery decisions. Results from the Test and Verify step provide feedback into the Plan, Define, and Design steps to identify areas for system improvements. Key to the systems engineering process is Modeling and Simulation (M&S), which reflects the integrated operational system's performance. Confidence in M&S is based on a comprehensive Verification, Validation, and Accreditation (VV&A) process. The BMDs Test Program, as documented in the Integrated Master Test Plan (IMTP), has a primary emphasis to provide the data necessary to verify and assess BMDs capabilities in support of Technical Capability Declarations, and to anchor BMDs M&S. As models are validated and accredited, MDA and the BMDs OTA Team will utilize these models to assess BMDs capabilities through a campaign of ground testing.

BMDs Test Program Functions include:

- Represent MDA as the single test authority to the test and evaluation community, international cooperative program representatives, and other organization representatives on test matters
- Develop and implement MDA test policy, standards, tools, products, and processes to enable effective tests while balancing MDA and element programmatic needs
- Develop an IMTP that compiles all MDA test objectives, test schedules, and funding requirements from the year of execution through the Future Years Defense Program time period and beyond (through FY 2024)
- Provide, maintain, and develop common test resources and infrastructure required to execute tests in the MDA Test Program by leveraging element laboratories, ranges, executing agents, and functional expertise, as applicable
- Act as the single point of contact in MDA for all external ranges and common test resources

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Missile Defense Agency				Date: May 2017		
Appropriation/Budget Activity		R-1 Program Element (Number/Name)				
0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)		PE 0603914C I Ballistic Missile Defense Test				
-Collect, archive, and distribute all MDA test data/information						
-Certify that test personnel are trained and equipped to conduct safe and effective tests						
-Provide test personnel and support services to plan and execute tests						
B. Program Change Summary (\$ in Millions)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget		281.740	293.441	337.537	-	337.537
Current President's Budget		290.267	293.441	305.791	-	305.791
Total Adjustments		8.527	0.000	-31.746	-	-31.746
• 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		8.527	0.000			
• SBIR/STTR Transfer		0.000	0.000			
• Other Adjustment		0.000	0.000	-31.746	-	-31.746
Change Summary Explanation						
The decrease in FY2018 from PB17 to PB18 is due to other higher priority agency initiatives and includes reduced contract spending for Mission Support Services in accordance with Department Service Requirement Review Board reductions through increased competition.						

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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 0603914C / Ballistic Missile Defense Test				Project (Number/Name) MD04 / BMDS Test Development Program			
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
MD04: BMDS Test Development Program	-	0.000	0.000	0.000	-	0.000	0.000	17.500	28.900	22.600	0	69.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

The new MD04 project executes in FY 2020 to support Continuous Integration/Continuous Agile Testing (CI/CAT).

A. Mission Description and Budget Item Justification

The BMDS Test Program will implement a Continuous Integration capability to support Continuous Agile Testing approach for integrated ground testing.

The BMDS Test Program will upgrade BMDS Integration and Development (BID) Lab and acquire additional BMDS Hardware-In-The-Loop simulation assets to support element pairwise and ensemble testing, provide test content flexibility and provide a venue to integrate the BMDS before entering formal ground tests (GT).

B. Accomplishments/Planned Programs (\$ in Millions)

N/A

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

N/A

Remarks

D. Acquisition Strategy

The BMDS Test Program acquisition strategy is consistent with the MDA capabilities-based acquisition strategy that emphasizes testing, evolutionary acquisition, and knowledge-based funding. Test directs a team of various internal staff (government and scientific, engineering and technical assistance support), executing agents (including DoD agencies, Service Organizations, Laboratories and Program Offices, Federally Funded Research and Development Center (FFRDC), and other MDA programs to execute the various diverse efforts within the BMDS test program through competition. When a specific effort/activity requires the use of an executing agent, respective headquarter regulations are used to conform the acquisition strategy.

The BMDS IMTP establishes and documents the test requirements for the BMDS with the specific focus on collecting the data needed for the Verification, Validation, and Accreditation (VV&A) of the BMDS Models and Simulations (M&S). This paradigm uses critical factor analysis to drive test design, planning, and execution for accrediting M&S, which is used to validate and assess system performance. With this test approach, MDA will establish confidence that the M&S used to evaluate the BMDS represent real world behavior, thereby enabling simulation-based performance assessment to verify system functionality.

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MD04 / <i>BMDS Test Development Program</i>
<u>E. Performance Metrics</u> 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 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MD04 / <i>BMDS Test Development Program</i>
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 0603914C / Ballistic Missile Defense Test										Project (Number/Name) MD04 / BMDS Test Development Program									
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							
Continuous Integration/Continuous Agile Testing (CI/CAT)																													

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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 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MD04 / <i>BMDS Test Development Program</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Continuous Integration/Continuous Agile Testing (CI/CAT)	1	2020	4	2022

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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 0603914C / <i>Ballistic Missile Defense Test</i>				Project (Number/Name) MT04 / <i>BMDS Test Program</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
MT04: <i>BMDS Test Program</i>	1,325.821	276.311	277.851	288.516	-	288.516	278.141	315.226	288.333	293.327	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

The increase from FY 2017 to FY 2018 is due to increase requirements for the FTO-03 intercept flight test.

A. Mission Description and Budget Item Justification

The Test Program provides consolidated MDA capabilities and resources to support the management and execution of BMDS and Element-level testing.

The MDA Test Program is responsible for all BMDS testing and relies on BMDS Systems Engineering to provide the system test objectives that define the test architecture by developing, updating, coordinating, and assessing the IMTP. The MDA Test Program plans and executes BMDS test events and develops the necessary test policy, test plans, and test infrastructure to conduct an effective test program. The goals of this budget project are to sustain and improve a robust testing program and to enhance M&S efforts to provide, in conjunction with flight and ground testing, confidence to the Combatant Commanders that the missile defense system works.

Activities are grouped into five major areas: 1) Program Planning and Operations; 2) Flight Test; 3) Ground Test; 4) Test Resources; and 5) Engineering Test Analysis.

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

	FY 2016	FY 2017	FY 2018
Title: Program Planning and Operations	98.395	97.780	100.203
Articles:	-	-	-
Description: The BMDS Test program is responsible for the following Program Planning and Operational activities: - Develop, update, coordinate and deliver the IMTP, which is coordinated with MDA and External stakeholders (Director, Operational Test and Evaluation (DOT&E); the Deputy Assistant Secretary of Defense for Developmental Test and Evaluation (DASD(DT&E)); the Joint Functional Component Command for Integrated Missile Defense (JFCC-IMD); and the Operational Test Agency (OTA)), and provide an affordable and executable test plan to meet Warfighter needs and National Security commitments. - Coordinate the IMTP Special Access Programs (SAP) Annex with respect to changes to SAP Program Test Baseline and synchronize with the collateral IMTP. - Serve as the MDA Test Interface/Liaison with the DOT&E to; the DASD(DT&E); JFCC-IMD; and the BMDS OTA. - Provide BMDS OTA System Team funding for personnel support of system level testing and conduct cybersecurity assessments of BMDS. - Plan, coordinate and execute cyber security testing of the BMDS. - Execute Flight Test Design Analysis ensuring test designs are safe and sufficient to meet test objectives.			

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MT04 / <i>BMDS Test Program</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
<ul style="list-style-type: none"> - Execute ground test planning activities supporting MDA test requirements and priorities to include test design, test integration, digital assessment, and international testing. - Update and maintain the classified Test Resource Mission Planning-Tool (Classified), TRMP-T(C) database. - Manage the approved test baseline by assessing all proposed changes to the BMDS Test Schedule and Test Configurations for each BMDS test event identified in the IMTP. - Support the Developmental Baseline Reviews and the annual BMDS Accountability Reviews to assess baseline execution risk and verify BMDS components are consistent with the approved test baseline. - Establish authority and maintain configuration control of the test baseline. - Review BMDS component programs' content on a quarterly basis to ensure consistency with the approved IMTP. - Serve as a voting member of the Failure Review, Analysis, and Corrective Action System (FRACAS) board to establish requirements for identifying, tracking, reporting, modifying, and closing BMDS Discrepancy Reports (BDRs). - Provide strategic technical planning support for the Test and Evaluation Standing Committee (TESC). - Provide the BMDS Test program director analytical capability for Flight and Ground test planning to include: test design feasibility assessments; flight safety, telemetry link margin, collision avoidance, pre- and post-test trajectory and truth sensor analysis; and Signatures Working Group activities. - Support Integration Synchronization Group (ISG) and the Program Change Board (PCB), establish authority and maintain configuration control of the test baseline via the Test Baseline Working Group. - Develop and maintain integrated test tools to support Truth Data Requirements Documents, Truth Data Packages, on-site Truth Quick-Look product development, pre- and post-test analysis test planning, and resource de-confliction; Integrated Data Management Plans (IDMPs), Data Handling Plans (DHPs), Information Assurance (IA) documentation, data planning and management, library operations, deployment process; infrastructure requirements process; and test operations support. - Manage the Missile Defense Data Center (MDDC) Program and its library, operations, and infrastructure providing centralized data management, archival, and distribution services. - Utilize the Program Integration Center for analytical needs in support of Flight and Ground Test Activities. - Provide analytical capability for Flight and Ground test planning to include: test design feasibility assessments, truth data and sensor analysis, truth data requirements documentation and data packages; flight safety analysis and flight safety data packages; and telemetry link margin, collision avoidance, and pre- and post-test trajectory analyses. - Chair a working group to define Flight Test pre-mission analysis input products/models and Post Intercept Debris (PID) scenes for new targets. - Develop, maintain, and integrate test tools to support pre- and post-test flight analysis and ground test design/analysis, truth data, and on-site Truth Quick-Look product development. - Coordinate budget planning and execution activities as well as manpower activities. - Maintain professional excellence and a diverse and professional workforce. 			

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
FY 2016 Accomplishments: Completion of the BMDS Test program planning and operational requirements as stated in the Description above.			
FY 2017 Plans: Continuation of the BMDS Test program planning and operational requirements as stated in the Description above.			
FY 2018 Plans: Continuation of the BMDS Test program planning and operational requirements as stated in the Description above.			
Title: Flight Test		25.906	23.686
Articles:		-	-
Description: The Flight Test Execution program solely reflects the Integrated Master Test Plan (IMTP) cost model. The program integrates, manages, and executes flight tests using certified personnel and standardized processes and products to support Ballistic Missile Defense System (BMDS) fielding to the warfighter.			16.194
<ul style="list-style-type: none"> - Develop flight test training requirements for Test Directors and other console operators. - Identify mission risks and implemented mitigation practices as required ensuring safe & successful test outcomes. - Provide a Failure Response Team ensuring implementation of the response plan. Captures lessons learned for process improvement. - Train test personnel for each flight test and maintain training records for all test personnel. -- Train and resource System Mission Managers to lead Integrated Event Test Team mission management and readiness activities across all four test event phases for System and Element flight test and contingency operations. - Complete test planning for BMDS Flight Test events as shown in Exhibit R-4/4A Schedule. - Identify and execute focused investments in the BMDS test infrastructure. - Conduct mission planning and range coordination activities; provide communications security equipment and management for BMDS Flight Test events as shown in Exhibit R-4/4A Schedule. - Design and develop the Lessons Learned database; define process and procedures for flight and ground tests. - Identify, monitor and develop burn down plans for target system mission risks for all BMDS missions as defined in the IMTP schedule. 			
FY 2016 Accomplishments: Completion of Flight Test Execution activities as stated above. Complete test planning for BMDS Flight Test events as shown in Exhibit R-4/4A Schedule.			
FY 2017 Plans:			

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MT04 / <i>BMDS Test Program</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
Continuation of the Flight Test Execution program as stated in the Description above. Complete test planning for BMDS Flight Test events as shown in Exhibit R-4/4A Schedule.			
FY 2018 Plans: Continuation of the Flight Test Execution program as stated in the Description above. Complete test planning for BMDS Flight Test events as shown in Exhibit R-4/4A Schedule. The decrease from FY 2017 is due to movement of FTO-03 E2 to FY 2019.			
Title: Ground Test		2.277	7.855
Articles:		-	-
Description: The Ground Test Execution program plans, designs, and executes BMDS ground tests in support of flight test risk reduction; BMDS fielding decisions; Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities (DOTMLPF) assessments; and warfighter training. In addition, enables the warfighter to effectively employ, maintain, and sustain the BMDS and participate in the development of future missile defense capabilities through efficient ground testing. The Ground Test Execution program solely reflects the IMTP cost model.		10.102	-
FY 2016 Accomplishments: Completion of the BMDS Test Program ground test execution activities as stated in the Description above.			
Addendum activities executed in FY 2016 are as follows: - Completed the GT-06 Part 2 campaign - Incorporated new cybersecurity testing. - Worked with international partners including NATO & Israel to incorporate their test requirements into the Department of Defense BMDS ground test. - Completed hardware and software testing in support of GTI-06 Part 2, GTI-ISR (Israeli) (16), GTD-06 Part 2 (BMDS Distributed Ground Test) and planning activities for GTI-07a and GTD-07a Part 1.			
FY 2017 Plans: Continuation of the Ground Test Execution program as stated in the Description above. - The increase from FY 2016 is due to execution of additional IMTP ground test events and completion of Dry Run/Runs for Record in GTI-07a and GTD-07a.			
Addendum activities planned in FY 2017 are as follows: - Complete cybersecurity red team testing in GTI-07a (BMDS Integrated Ground Test) event. - Support Early Integration activities for GTI-07b (EUCOM/CENTCOM) and Early Integration planning for GT-07b (NORTHCOM/PACOM).			

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603914C / Ballistic Missile Defense Test	Project (Number/Name) MT04 / BMDS Test Program		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018
<p>- Complete hardware and software testing, truth drivers and framework integration, formal execution runs and/or official data collection in support of GTI-07a and GTD-07a Part 1. Conduct planning activities for GTX-07b, GTI-07b, GTD-07b P2 and GTD-07b P1, GT-08 and GTI-ISR (18).</p> <p>FY 2018 Plans: Continuation of the Ground Test Execution program as stated in the Description above.</p> <p>- The increase from FY 2017 is due to execution of additional IMTP ground test events, to include completion of Dry Run/Runs for Record for GTI-07b, GTI-067b and GTD-07b.</p> <p>Addendum activities planned in FY 2018 are as follows:</p> <p>- Continue to incorporate cybersecurity testing requirements into the BMDS ground tests to include planning for cyber requirements in FY 2019 GTD-07b test event.</p> <p>- Develop CONOPS to support Continuous Integration (CI)/ Continuous Agile Testing (CAT) emerging requirements, which begins execution in FY 2020.</p> <p>- Complete hardware and software testing, truth drivers and framework integration, formal execution runs and/or official data collection in support of GTI-07b (NORTHCOM/CENTCOM) and GTD-07b (USEUCOM/CENTCOM). Conduct planning activities for GTD-07b, and GT-08 campaign.</p>				
<p>Title: Test Resources</p> <p align="right">Articles:</p> <p>Description: The BMDS Test Program procures, maintains, and manages test resource infrastructure and provides trained Test Resource Managers to integrate test resources into each test event for the BMDS Test Program.</p> <p>The Test Resources program is responsible for the following activities:</p> <p>- Maintain the MDA unique range facilities and mobile sensors, communication, data processing and dissemination infrastructure to support a broad spectrum of test requirements including metric tracking, target characterization, and multi-spectral imagery of BMDS phenomena.</p> <p>- Maintain and extend the Directorate of Test Support System (DTSS) classified Computer Network Defense Service Provider (CNDSP) to support network cyber security defense for ground test network systems. Continue to define cyber security investments, risks and benefits used to reduce vulnerabilities and protect critical administrative and test data.</p> <p>- Maintain accreditation of the Orion Voice Switch Conferencing System (VSCS).</p> <p>- Construct the new Wake Island communications facility and provide enhancements to the fiber backbone providing FTCN services to remote sites.</p> <p>FY 2016 Accomplishments:</p>		123.298 -	120.725 -	131.636 -

UNCLASSIFIED

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MT04 / <i>BMDs Test Program</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
<ul style="list-style-type: none"> - Assessed degraded lodging capability on Wake Island and developed path forward to modernize/procure/construct housing. - Assisted in performing Wake upgrades to support 14 test events across the IMTP. - Began to implement findings from the Ground Test Continuous Integration (CI) strategy for improvements and potential new assets required to support the GT-07 and GT-08 Campaigns to address EPAA Phase 3. <p>FY 2017 Plans: Continuation of the Test Resources program as stated in the Description above. Addendum activities planned in FY 2017 are as follows:</p> <ul style="list-style-type: none"> - Conduct initial planning for the Airborne Sensors Fleet Renewal, scheduled to begin in FY 2018. - Conduct re-compete of the ARC contract with a potential award in FY 2018. - Complete technical refresh/replacement of the MDIOC Orion voice communication system. - Convert Pacific Collector's controllable pitch propeller (CPP) pitch controls from pneumatic to electronic and replace the CPP Oil Distribution (OD) box with MARAD spare OD box. - Take delivery of 101 TTS modified receivers eliminating obsolescence issues, completing IA upgrades, adding tier 1 & 2 modulation capability, and installing future C-band capability. - Complete qualification testing and take delivery of two dual-band (S&C band) transmitters produced under STTR program and plan shadow mode flight test on Target of Opportunity. - Incorporate infrared camera on ELTS radar to increase capability for collecting launch area and event phenomena, potentially improve radar accuracies, and improve visibility at night for radar calibration. - Upgrade the controls and power-pack systems on the Pacific Collector, and replace the OD Box with the MARAD spare. - Execute several mission support facility modernization projects, including work on mission critical Missile Assembly Buildings and test equipment storage facilities. - Support contract award for MILCON project to build a new \$11.67 million Wake Island Test Support Facility to be completed in 1QFY 2019. - Conduct facility upgrades and renovation as needed to meet test specific requirement to support BMDs test schedule, to include On-Condition Cyclic Maintenance on PVT Sorenson to ensure transportation needs for FTO-03. - Evaluate the condition of the Meck Island temporary housing for removal or storage for future test events. - Implement actions from the Ground Test Process Improvement Plan (GTPIP) strategy for improvements and potential new assets required to support the GT-07 and GT-08 Campaigns to address European Phased Adaptive Approach (EPAA) Phase 3. <p>FY 2018 Plans: The increase is due to early engineering for the replacement of the aging HALO and ABS Obsolete platforms to meet FAA requirements by FY 2020.</p>			

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
Continuation of the Test Resources program as stated in the Description above. Addendum activities planned in FY 2018 are as follows: <ul style="list-style-type: none"> - Initiate Non-Recurring Engineering (NRE) for migration of Airborne Sensors airframes to 2 newer platforms. The NRE phase leads to the acquisition of 1 replacement aircraft in FY 2018 and the acquisition of the 2nd aircraft in FY 2020. After modifications and testing, the first aircraft will be ready for MDA test support in FY 2020 and the second in FY 2021. - Conduct mandatory intermediate dry-dock of Pacific Collector (Sep18) and Pacific Tracker (Jun 18). - Develop a plan for converting Pacific Tracker's main propulsion system from burning heavy Intermediate Fuel Oil to burning much lighter marine diesel fuel. - Build control room for Transportable Telemetry Systems (TTS) on Pacific Tracker to move operations out of below-deck trailers. - Replace Sea Tel secondary C-Band SATCOM antennas onboard Pacific Tracker and Pacific Collector to address End of Life (EoL). - Support all BMDS Hardware-in-the-Loop ground testing conducted in FY 2018 with the full complement of HWIL test assets located at the ARC. 			
Title: Engineering and Test Analysis		26.435	27.805
Articles:		-	-
Description: The Engineering and Analysis effort provides essential BMDS ground and flight test event planning, execution, and evaluation activities for each test event: <ul style="list-style-type: none"> - Designing test architecture, defining test objectives and evaluation criteria, defining target requirements, and generating ground and flight test scenarios appropriate to the data collection requirements to assess BMDS performance and anchor Models and Simulations. - Producing the threat data for BMDS ground and flight tests. - Coordinating with BMDS OTA to address test issues, disposition them, coordinate them, with the OTA and recommend action plans to achieve closure. - Delivering HWIL M&S integration test cases. - Integrating, testing, functionally qualifying, and delivering end-to-end BMDS simulations supporting ground test missions. - Analyzing System-level interoperability. - Conducting modeling and technical analysis for Combatant Command wargames and exercises. - Utilizing M&S for pre-test assessment and post-test review, as well as M&S updates. - Providing test configuration management; risk assessments; and anomaly/deficiency review, assessment and closure. - Analyzing test results to identify verification and validation data collection shortfalls and reassigning objectives to future test events as required. - Documenting BMDS test observations for system-level test anomalies and coordinating the resulting BMDS Discrepancy Reports within the Failure Reporting, Analysis, and Corrective Action System (FRACAS) 			30.381

UNCLASSIFIED

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Appropriation/Budget Activity 0400 / 4				R-1 Program Element (Number/Name) PE 0603914C / Ballistic Missile Defense Test				Project (Number/Name) MT04 / BMDS Test Program															
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2016		FY 2017		FY 2018											
<p>- Providing the Quick Look Brief, Mission Data Review (MDR), and Executive MDR. IMTP and infrastructure tasks include:</p> <p>- Providing long-range BMDS IMTP planning and integration strategies related to overarching BMDS analysis product integration.</p> <p>- Upgrading test analysis tools in concert with the BMDS evolution (e.g., Modular Analysis and Reporting Suite (MARS)) to enhance analysis capability and efficiency.</p> <p>- Populating the MARS database with data from the most recently completed tests to support as-built analysis and capability assessments.</p> <p>- Providing engineering analysis process software to include System Coordination and Observation Reporting Environment (SCORE), Software Change Analysis Review Environment (SCARE), File Manager (FileMan), and ManPower Loading (MPL).</p> <p>- Incrementally improving and providing infrastructure, software, and MDA/IA compliance for the RAPid Scenario Prototyping (RaSP) capability.</p> <p>FY 2016 Accomplishments: Conducted the activities listed in the Description section above.</p> <p>FY 2017 Plans: FY 2017 increase keeps pace with projected FY 2017-FY 2021 IMTP events.</p> <p>- Conduct the activities listed in the Description section above.</p> <p>- Validate test event data collection and conduct post-test analyses supporting delivery of Near-term Discrimination Improvements and Enhanced Homeland Defense capabilities.</p> <p>FY 2018 Plans: FY 2018 decrease keeps pace with projected FY 2018-FY 2022 IMTP events.</p> <p>- Conduct the activities listed in the Description section above.</p> <p>- Validate test event data collection and conduct post-test analyses supporting the EPAA Phase 3 Technical Capability Declaration.</p>																							
Accomplishments/Planned Programs Subtotals								276.311		277.851		288.516											
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	
• 0603890C: BMD Enabling Programs		406.326		408.594		449.442		-		449.442		466.760		540.409		629.864		501.915		Continuing		Continuing	
Remarks																							

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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 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MT04 / <i>BMDS Test Program</i>
<p><u>D. Acquisition Strategy</u></p> <p>The BMDS Test Program acquisition strategy is consistent with the MDA capabilities-based acquisition strategy that emphasizes testing, evolutionary acquisition, and knowledge-based funding. Test directs a team of various internal staff (government and scientific, engineering and technical assistance support), executing agents (including DoD agencies, Service Organizations, Laboratories and Program Offices, Federally Funded Research and Development Center (FFRDC), and other MDA programs to execute the various diverse efforts within the BMDS test program through competition. When a specific effort/activity being conducted, acquired, or maintained requires the use of an executing agent, respective headquarter regulations are used to conform the acquisition strategy.</p> <p>The MDA IMTP establishes and documents the test requirements for the BMDS with the specific focus on collecting the data needed for the Verification, Validation, and Accreditation (VV&A) of the BMDS Models and Simulations. This paradigm uses critical factor analysis to drive test design, planning, and execution for accrediting M&S, which is used to validate and assess system performance. With this test approach, MDA will establish confidence that the M&S used to evaluate the BMDS represent real world behavior, thereby enabling simulation-based performance assessment to verify system functionality.</p> <p><u>E. Performance Metrics</u></p> <p>N/A</p>		

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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 0603914C / <i>Ballistic Missile Defense Test</i>						Project (Number/Name) MT04 / <i>BMDs Test Program</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
Subtotal			-	-		-		-		-		-	-	-	-
Remarks N/A															
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
Subtotal			-	-		-		-		-		-	-	-	-
Remarks N/A															
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
Program Planning and Operations - IMTP Planning and Data Management Tools	C/FP	None : AL	88.212	21.012	Feb 2016	21.099	Oct 2016	21.723	Feb 2018	-		21.723	Continuing	Continuing	Continuing
Program Planning and Operations - Lab Analysis Infrastructure	MIPR	MIT-LL/Aerospace : AL/CA/MA	47.048	8.071	Feb 2016	7.053	Oct 2016	8.059	Feb 2018	-		8.059	Continuing	Continuing	Continuing
Program Planning and Operations - Operational Test Agency	MIPR	ATEC/Aberdeen Proving Grounds : MD	54.986	12.733	Feb 2016	12.536	Oct 2016	13.166	Feb 2018	-		13.166	Continuing	Continuing	Continuing
Program Planning and Operations - Support to Flight Testing	C/CPAF	Northrop Grumman/ Lockheed Martin : AL/CO	29.171	12.116	Oct 2015	12.009	Oct 2016	12.571	Oct 2017	-		12.571	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 0603914C / <i>Ballistic Missile Defense Test</i>				Project (Number/Name) MT04 / <i>BMDs Test Program</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
Program Planning and Operations - Support to Ground Testing	C/CPAF	MDIOC/JRDC/ Northrop Grumman : AL/CO/VA/DC	10.078	5.039	Oct 2015	5.011	Oct 2016	5.645	Oct 2017	-		5.645	Continuing	Continuing	Continuing
Program Planning and Operations - Support to Test Resources	C/CPAF	None : MiDAESS/AL	15.954	4.066	Oct 2015	4.176	Oct 2016	4.354	Oct 2017	-		4.354	Continuing	Continuing	Continuing
Program Planning and Operations - Test Functional Management Office	C/CPFF	None : MDA/ MiDAESS/AL/VA/ CO/MA	246.742	35.358	Mar 2016	35.896	Oct 2016	34.685	Mar 2018	-		34.685	Continuing	Continuing	Continuing
Flight Test - IMTP Flight Testing	MIPR	Air & Missile Def Command/AFGSC/ H'ville Operations Support Center/ NAWC/NRL/Ronald Reagan Test Site /SPAWAR/ Vandenberg AFB/ White Sands Missile Range/AMRDEC/ NSWC/PMRF/611th CES/611th ASUS/ AEDC : AL/CA/CO/ HI	209.706	25.906	Oct 2015	23.686	Oct 2016	16.194	Oct 2017	-		16.194	Continuing	Continuing	Continuing
Ground Test - IMTP Ground Testing	MIPR	Aviation & Missile Research & Development/LTPO/ Space & Naval Warfare Command : AL/CO/CA	40.585	2.277	Oct 2015	7.855	Oct 2016	10.102	Oct 2017	-		10.102	Continuing	Continuing	Continuing
Test Resources - Airborne Optics Mobile Assets	C/IDIQ	None : L3/JHU/APL/ TX/MD/AZ/TN	71.409	16.400	Feb 2016	15.355	Oct 2016	17.014	Feb 2018	-		17.014	Continuing	Continuing	Continuing
Test Resources - Core Ground Test Communication Support	MIPR	Space and Naval Warfare Command : AL/CA	15.772	4.127	Nov 2015	3.127	Oct 2016	3.908	Nov 2017	-		3.908	0	26.934	0

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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 0603914C / <i>Ballistic Missile Defense Test</i>				Project (Number/Name) MT04 / <i>BMDs Test Program</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
Test Resources - Core Ground Test Labs and HWILS	C/IDIQ	None : Colsa/AMRDEC/AL/MD/FL/CA/OH/CO	114.781	26.457	Feb 2016	25.457	Oct 2016	28.675	Feb 2018	-		28.675	Continuing	Continuing	Continuing
Test Resources - Enhanced GT Capability Assets	C/IDIQ	None : Colsa/Boeing/NG/AL/CO/FL/MD/HI	19.748	8.080	Feb 2016	7.590	Oct 2016	7.759	Feb 2018	-		7.759	Continuing	Continuing	Continuing
Test Resources - Facilities Sustainment, Restoration & Modernization	MIPR	SMDC/Northrup Grumman/Colsa : AL/CO/NM	7.598	4.430	Nov 2015	4.144	Oct 2016	4.543	Nov 2017	-		4.543	Continuing	Continuing	Continuing
Test Resources - Flight Test Instrumentation	C/IDIQ	ASI/WSMR : Gray Research/NRL/NAWC/CA/MD/NCR/NM/AL/MA	70.471	12.413	Nov 2015	12.743	Oct 2016	12.751	Nov 2017	-		12.751	Continuing	Continuing	Continuing
Test Resources - Flight Test Ranges	C/IDIQ	SMDC/SNL/PMRF : NAWC/WSMR/AMRDEC/NG/AK/AL/CA/HI/NM/CO	58.274	11.056	Nov 2015	8.991	Oct 2016	11.862	Nov 2017	-		11.862	Continuing	Continuing	Continuing
Test Resources - Sea Based Mobile Assets	MIPR	None : MARAD/NAWC/Hanscom AFB/AL/CA/MD/NCR/NM/MA	56.016	12.411	Nov 2015	12.313	Oct 2016	12.528	Nov 2017	-		12.528	Continuing	Continuing	Continuing
Test Resources - Support to Test Resources	MIPR	None : MiDAESS/AL	92.809	21.951	Nov 2015	31.005	Oct 2016	32.596	Nov 2017	-		32.596	Continuing	Continuing	Continuing
Test Resources - Target ILS	MIPR	None : NSA/NAVSPECWARCOM/PMRF/RTC/SNL/YPG AL/CA/HI/NM	5.500	5.973	Nov 2015	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Engineering and Test Analysis - CSS Support	C/CPFF	Torch Technologies : AL	12.431	6.000		6.217	Nov 2016	4.079	Nov 2017	-		4.079	Continuing	Continuing	Continuing
Engineering and Test Analysis - FFRDA/UARC 2	MIPR	Aerospace : CA	0.000	0.755		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Engineering and Test Analysis - FFRDC/UARC	MIPR	MITRE : VA	3.187	0.000		0.000		0.000		-		0.000	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 0603914C / <i>Ballistic Missile Defense Test</i>				Project (Number/Name) MT04 / <i>BMDs Test Program</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
Engineering and Test Analysis - Industry Support - NME	C/CPAF	Northrop Grumman-JRDC : CO, AL	0.000	0.000		0.000		1.848	Nov 2017	-		1.848	Continuing	Continuing	Continuing
Engineering and Test Analysis - Industry Support	C/CPAF	Boeing : AL	17.469	2.569		2.409	Nov 2016	1.856	Nov 2017	-		1.856	Continuing	Continuing	Continuing
Engineering and Test Analysis - OGA Support	MIPR	AMRDEC : AL	37.874	17.111		16.618	Nov 2016	19.836	Nov 2017	-		19.836	Continuing	Continuing	Continuing
Engineering and Test Analysis - OGA Support - NME	MIPR	LTPO : AL	0.000	0.000		2.561	Nov 2016	2.762	Nov 2017	-		2.762	Continuing	Continuing	Continuing
Subtotal			1,325.821	276.311		277.851		288.516		-		288.516	-	-	-

Remarks N/A															
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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															
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			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			1,325.821	276.311		277.851		288.516		-		288.516	-	-	-

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 0603914C / Ballistic Missile Defense Test					Project (Number/Name) MT04 / BMDS Test Program									
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		
FTP-10 (P8-4) (LTPO, Intercept Flight Test)					▲														
AA CTV-02 (FTO-02 E1a CTV) AEGIS AA, Intercept Only Flight Test)					▲														
ASD-15 (Intercept Flight Test)					◆														
FTP-14 E1 (P82A) (LTPO, Intercept Flight Test)					◆														
FTP-14 E2 (P82B) (LTPO, Intercept Flight Test)					◆														
SCD CTV-02 (AEGIS SCD, Intercept Only Flight Test)					▲														
Israeli Cooperative Intercept Flight Test (14A) - FY 2016					◆	◆	◆	◆											
Israeli Cooperative Intercept Flight Test - FY 2016					◆	◆	◆	◆											
FTP-09 (P8-3) (LTPO, Intercept Flight Test)						▲													
GM CTV-02 Plus (GM, Intercept Flight Test)						▲													
SM CTV-01 (AEGIS 3.6.1, Intercept Only Flight Test)						▲													
FTX-21 (AEG IS SBT, Target Only Flight Test)							◆												
GTI-06 Part 2 (BMDS Ground Test)							◆												
GTI-ISR (16) (BMDS Ground Test)							◆												
SM CTV-02 (AEGIS 3.6.1, Intercept Only Flight Test)							▲												
SM CTV-01a (AEGIS 3.6.1, Intercept Only Flight Test)							▲												
GTD-06 Part 2 (BMDS Ground Test)								◆											
FTM-27 (AEGIS SBT, Intercept Flight Test)									△										
Israeli Cooperative Intercept Flight Test - FY 2017									◇	◇	◇	◇							
SFTM-01 (AEGIS 5.1, Intercept Flight Test)										△									
Warfighter TP 06 (BMDS Ground Test)										◇									
FTX-30 (DT Tracking Exercise Flight Test)										△									
FTX-31 (DT Tracking Exercise Flight Test)										△									
FTT-18 (TH, Intercept Flight Test)											△								

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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)					Project (Number/Name)											
0400 / 4					PE 0603914C / Ballistic Missile Defense Test					MT04 / BMDS Test Program											
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				
FTT-15 (TH, Intercept Flight Test)								△													
FTG-15 (GM, Intercept Flight Test)								△													
SFTM-02 (AEGIS 5.1, Intercept Flight Test)								△													
FTP-11 (P8-0T2) (LTPO, Intercept Flight Test)								△													
FTP-12 (P8-0T3) (LTPO, Intercept Flight Test)								△													
FTX-32 (DT Tracking Exercise Flight Test)								△													
FTX-33 (DT Tracking Exercise Flight Test)								△													
FTX-34 (DT Tracking Exercise Flight Test)								△													
GTI-07a (BMDS Ground Test)							◇	◇													
FTP-13 (P8-0T4) (LTPO, Intercept Flight Test)								△													
GTD-07a (BMDS Ground Test)								◇													
FEV-01 (FTM-DST 1) (AEGIS 5.0, Intercept Flight Test)								△													
FS 17-1 (DT Tracking Exercise Flight Test)								△													
FTM-26 (AEGIS, Intercept Flight Test)								△													
FTM-27 (AEGIS, Intercept Flight Test)								△													
SM CTV-03 (AEGIS 3.6.1, Intercept Only Flight Test)								△													
FTM-29 (AEGIS 5.1, Intercept Flight Test)									△												
FE-1 (DT Tracking Exercise Flight Test)									△												
FS 17-2 (DT Tracking Exercise Flight Test)									△												
FS 17-4 (DT Tracking Exercise Flight Test)									△												
Israeli Cooperative Intercept Flight Test - FY 2018									◇	◇	◇	◇									
Warfighter TP 07a (BMDS Ground Test)										◇											
FTX-35 (TH, Target Only Flight Test)										△											
FTX-36 (TH, Patriot Target Only Flight Test)										△											

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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 0603914C / Ballistic Missile Defense Test										Project (Number/Name) MT04 / BMDS Test Program									
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							
GTI-07b (E/C) (BMDS Ground Test)									◇	◇														
FT0-03 E1 (OTA, Intercept Flight Test)										△														
FTG-11 (IOT&E) (GM, Intercept Flight Test)										△														
JFTM-5 E1 (AEGIS 5.1, Intercept Flight Test)										△														
JFTM-5 E2 (AEGIS 5.1, Intercept Flight Test)										△														
GTD-07b (E/C) (BMDS Ground Test)										◇	◇													
FTM-31 (AEGIS SBT, Intercept Flight Test)											△													
GTI-07b (N/P) (BMDS Ground Test)											◇													
GTI-ISR (18) (BMDS Ground Test)											△													
Israeli Cooperative Intercept Flight Test - FY 2019											◇	◇	◇	◇										
FT0-03 E2 (OTA, Intercept Flight Test)												△												
FTP-17 (IBCS Intercept Flight Test)												△												
FTP-16 (IBCS Intercept Flight Test)												△												
FTM-32 (AEGIS SBT, Intercept Flight Test)												△												
FTM-33 (AEGIS SBT, Intercept Flight Test)												△												
GTD-07b (N/P) (BMDS Ground Test)												◇	◇											
FTX-23 (AEGIS 5.1, Target Only Flight Test)													△											
FEV-02 (FTM-DST 2) (AEGIS 5.0, Intercept Flight Test)													△											
FTX-27 (SN, Target Only Flight Test)													△											
GTI-08 (E/C) (BMDS Ground Test)													◇	◇										
Warfighter TP 07b (BMDS Ground Test)														◇										
GM CTV-03 (GM, Non-Intercept Flight Test)														△										
Israeli Cooperative Intercept Flight Test - FY 2020														◇	◇	◇	◇							
FTP-18 (BCS Intercept Flight Test)															△									

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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 0603914C / Ballistic Missile Defense Test										Project (Number/Name) MT04 / BMDS Test Program									
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							
FTP-19 (BCS Intercept Flight Test)																		△											
FTP-20 (BCS Intercept Flight Test)																		△											
JFTM-7 E1 (AEGIS 5.1, Intercept Flight Test)																		△											
JFTM-7 E2 (AEGIS 5.1, Intercept Flight Test)																		△											
GTI-08 (N/P)(BMDS Ground Test)																		◇	◇										
FTT-19 (TH, Intercept Flight Test)																		△											
FTM-24 (AEGIS 5.0, Intercept Flight Test)																		△											
GTD-08 (E/C) (BMDS Ground Test)																		◇	◇										
FTM-30 (AEGIS 5. 1, Intercept Flight Test)																			△										
GTD-08 (N/P) (BMDS Ground Test)																				◇									
GT-21 Sprint 1 (BMDS Ground Test)																				◇									
FTG-17 (IOT&E) (GM, Intercept Flight Test)																				△									
Israeli Cooperative Intercept Flight Test - FY 2021																				◇	◇	◇	◇						
Warfighter TP 08 (BMDS Ground Test)																					◇								
GT-21 Sprint 2 (BMDS Ground Test)																					◇								
GT-21 Sprint 3 (BMDS Ground Test)																					◇	◇							
FTX-26 (SN, Target Only Flight Test)																						△							
FTM-38 (AEGIS 5.0, Intercept Flight Test)																						△							
GT-21 Sprint 4 (BMDS Ground Test)																						◇							
GTI-ISR (21) (BMDS Ground Test)																						◇							
FTT-21 (TH, Intercept Flight Test)																							△						
GT-21 Sprint 5 (BMDS Ground Test)																							◇						
GT-21 Sprint 6 (BMDS Ground Test)																							◇						
FTG-18 (GM, Intercept Flight Test)																								△					

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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 0603914C / Ballistic Missile Defense Test					Project (Number/Name) MT04 / BMDS Test Program									
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		
GT-22 Sprint 1 (BMDS Ground Test)																	◇		
Israeli Cooperative Intercept Flight Test - FY 2022																	◇	◇	
GT-22 Sprint 2 (BMDS Ground Test)																	◇		
GT-22 Sprint 3 (BMDS Ground Test)																	◇		
FTM-35 (AEGIS 5.1, Intercept Flight Test)																		△	
FTM-37 (IOT&E) (AEGIS 5.1, Intercept Flight Test)																		△	
FTX-28 E1 (TH, Target Only Flight Test)																		△	
FTX-28 E2 (TH, Target Only Flight Test)																		△	
FTX-28 E3 (TH, Target Only Flight Test)																		△	
GT-22 Sprint 4 (BMDS Ground Test)																		◇	
GTD-22 (E/C) (BMDS Ground Test)																		◇	

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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 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MT04 / <i>BMDS Test Program</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FTP-10 (P8-4) (LTPO, Intercept Flight Test)	1	2016	1	2016
AA CTV-02 (FTO-02 E1a CTV) AEGIS AA, Intercept Only Flight Test)	1	2016	1	2016
ASD-15 (Intercept Flight Test)	1	2016	1	2016
FTP-14 E1 (P82A) (LTPO, Intercept Flight Test)	1	2016	1	2016
FTP-14 E2 (P82B) (LTPO, Intercept Flight Test)	1	2016	1	2016
SCD CTV-02 (AEGIS SCD, Intercept Only Flight Test)	1	2016	1	2016
Israeli Cooperative Intercept Flight Test (14A) - FY 2016	1	2016	4	2016
Israeli Cooperative Intercept Flight Test - FY 2016	1	2016	4	2016
FTP-09 (P8-3) (LTPO, Intercept Flight Test)	2	2016	2	2016
GM CTV-02 Plus (GM, Intercept Flight Test)	2	2016	2	2016
SM CTV-01 (AEGIS 3.6.1, Intercept Only Flight Test)	2	2016	2	2016
FTX-21 (AEG IS SBT, Target Only Flight Test)	3	2016	3	2016
GTI-06 Part 2 (BMDS Ground Test)	3	2016	3	2016
GTI-ISR (16) (BMDS Ground Test)	3	2016	3	2016
SM CTV-02 (AEGIS 3.6.1, Intercept Only Flight Test)	3	2016	3	2016
SM CTV-01a (AEGIS 3.6.1, Intercept Only Flight Test)	3	2016	3	2016
GTD-06 Part 2 (BMDS Ground Test)	4	2016	4	2016
FTM-27 (AEGIS SBT, Intercept Flight Test)	1	2017	1	2017
Israeli Cooperative Intercept Flight Test - FY 2017	1	2017	4	2017
SFTM-01 (AEGIS 5.1, Intercept Flight Test)	2	2017	2	2017
Warfighter TP 06 (BMDS Ground Test)	2	2017	2	2017
FTX-30 (DT Tracking Exercise Flight Test)	2	2017	2	2017

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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 0603914C / <i>Ballistic Missile Defense Test</i>		Project (Number/Name) MT04 / <i>BMDS Test Program</i>	
		Start		End	
Events	Quarter	Year	Quarter	Year	
FTX-31 (DT Tracking Exercise Flight Test)	2	2017	2	2017	
FTT-18 (TH, Intercept Flight Test)	3	2017	3	2017	
FTT-15 (TH, Intercept Flight Test)	3	2017	3	2017	
FTG-15 (GM, Intercept Flight Test)	3	2017	3	2017	
SFTM-02 (AEGIS 5.1, Intercept Flight Test)	3	2017	3	2017	
FTP-11 (P8-0T2) (LTPO, Intercept Flight Test)	3	2017	3	2017	
FTP-12 (P8-0T3) (LTPO, Intercept Flight Test)	3	2017	3	2017	
FTX-32 (DT Tracking Exercise Flight Test)	3	2017	3	2017	
FTX-33 (DT Tracking Exercise Flight Test)	3	2017	3	2017	
FTX-34 (DT Tracking Exercise Flight Test)	3	2017	3	2017	
GTI-07a (BMDS Ground Test)	3	2017	4	2017	
FTP-13 (P8-0T4) (LTPO, Intercept Flight Test)	4	2017	4	2017	
GTD-07a (BMDS Ground Test)	4	2017	4	2017	
FEV-01 (FTM-DST 1) (AEGIS 5.0, Intercept Flight Test)	4	2017	4	2017	
FS 17-1 (DT Tracking Exercise Flight Test)	4	2017	4	2017	
FTM-26 (AEGIS, Intercept Flight Test)	4	2017	4	2017	
FTM-27 (AEGIS, Intercept Flight Test)	4	2017	4	2017	
SM CTV-03 (AEGIS 3.6.1, Intercept Only Flight Test)	4	2017	4	2017	
FTM-29 (AEGIS 5.1, Intercept Flight Test)	1	2018	1	2018	
FE-1 (DT Tracking Exercise Flight Test)	1	2018	1	2018	
FS 17-2 (DT Tracking Exercise Flight Test)	1	2018	1	2018	
FS 17-4 (DT Tracking Exercise Flight Test)	1	2018	1	2018	
Israeli Cooperative Intercept Flight Test - FY 2018	1	2018	4	2018	
Warfighter TP 07a (BMDS Ground Test)	2	2018	2	2018	
FTX-35 (TH, Target Only Flight Test)	2	2018	2	2018	

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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 0603914C / <i>Ballistic Missile Defense Test</i>		Project (Number/Name) MT04 / <i>BMDS Test Program</i>	
		Start		End	
Events	Quarter	Year	Quarter	Year	
FTX-36 (TH, Patriot Target Only Flight Test)	2	2018	2	2018	
GTI-07b (E/C) (BMDS Ground Test)	2	2018	3	2018	
FT0-03 E1 (OTA, Intercept Flight Test)	3	2018	3	2018	
FTG-11 (IOT&E) (GM, Intercept Flight Test)	4	2018	4	2018	
JFTM-5 E1 (AEGIS 5.1, Intercept Flight Test)	4	2018	4	2018	
JFTM-5 E2 (AEGIS 5.1, Intercept Flight Test)	4	2018	4	2018	
GTD-07b (E/C) (BMDS Ground Test)	4	2018	1	2019	
FTM-31 (AEGIS SBT, Intercept Flight Test)	1	2019	1	2019	
GTI-07b (N/P) (BMDS Ground Test)	1	2019	1	2019	
GTI-ISR (18) (BMDS Ground Test)	1	2019	1	2019	
Israeli Cooperative Intercept Flight Test - FY 2019	1	2019	4	2019	
FT0-03 E2 (OTA, Intercept Flight Test)	2	2019	2	2019	
FTP-17 (IBCS Intercept Flight Test)	2	2019	2	2019	
FTP-16 (IBCS Intercept Flight Test)	2	2019	2	2019	
FTM-32 (AEGIS SBT, Intercept Flight Test)	3	2019	3	2019	
FTM-33 (AEGIS SBT, Intercept Flight Test)	3	2019	3	2019	
GTD-07b (N/P) (BMDS Ground Test)	3	2019	4	2019	
FTX-23 (AEGIS 5.1, Target Only Flight Test)	4	2019	4	2019	
FEV-02 (FTM-DST 2) (AEGIS 5.0, Intercept Flight Test)	4	2019	4	2019	
FTX-27 (SN, Target Only Flight Test)	4	2019	4	2019	
GTI-08 (E/C) (BMDS Ground Test)	4	2019	1	2020	
Warfighter TP 07b (BMDS Ground Test)	1	2020	1	2020	
GM CTV-03 (GM, Non-Intercept Flight Test)	1	2020	1	2020	
Israeli Cooperative Intercept Flight Test - FY 2020	1	2020	4	2020	
FTP-18 (BCS Intercept Flight Test)	2	2020	2	2020	

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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 0603914C / <i>Ballistic Missile Defense Test</i>		Project (Number/Name) MT04 / <i>BMDS Test Program</i>	
		Start		End	
Events	Quarter	Year	Quarter	Year	
FTP-19 (BCS Intercept Flight Test)	2	2020	2	2020	
FTP-20 (BCS Intercept Flight Test)	2	2020	2	2020	
JFTM-7 E1 (AEGIS 5.1, Intercept Flight Test)	2	2020	2	2020	
JFTM-7 E2 (AEGIS 5.1, Intercept Flight Test)	2	2020	2	2020	
GTI-08 (N/P)(BMDS Ground Test)	2	2020	3	2020	
FTT-19 (TH, Intercept Flight Test)	3	2020	3	2020	
FTM-24 (AEGIS 5.0, Intercept Flight Test)	3	2020	3	2020	
GTD-08 (E/C) (BMDS Ground Test)	3	2020	4	2020	
FTM-30 (AEGIS 5. 1, Intercept Flight Test)	4	2020	4	2020	
GTD-08 (N/P) (BMDS Ground Test)	1	2021	1	2021	
GT-21 Sprint 1 (BMDS Ground Test)	1	2021	1	2021	
FTG-17 (IOT&E) (GM, Intercept Flight Test)	1	2021	1	2021	
Israeli Cooperative Intercept Flight Test - FY 2021	1	2021	4	2021	
Warfighter TP 08 (BMDS Ground Test)	2	2021	2	2021	
GT-21 Sprint 2 (BMDS Ground Test)	2	2021	2	2021	
GT-21 Sprint 3 (BMDS Ground Test)	2	2021	3	2021	
FTX-26 (SN, Target Only Flight Test)	3	2021	3	2021	
FTM-38 (AEGIS 5.0, Intercept Flight Test)	3	2021	3	2021	
GT-21 Sprint 4 (BMDS Ground Test)	3	2021	3	2021	
GTI-ISR (21) (BMDS Ground Test)	3	2021	3	2021	
FTT-21 (TH, Intercept Flight Test)	4	2021	4	2021	
GT-21 Sprint 5 (BMDS Ground Test)	4	2021	4	2021	
GT-21 Sprint 6 (BMDS Ground Test)	4	2021	4	2021	
FTG-18 (GM, Intercept Flight Test)	1	2022	1	2022	
GT-22 Sprint 1 (BMDS Ground Test)	1	2022	1	2022	

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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 0603914C / Ballistic Missile Defense Test		Project (Number/Name) MT04 / BMDS Test Program	
		Start		End	
Events		Quarter	Year	Quarter	Year
Israeli Cooperative Intercept Flight Test - FY 2022		1	2022	4	2022
GT-22 Sprint 2 (BMDS Ground Test)		2	2022	2	2022
GT-22 Sprint 3 (BMDS Ground Test)		2	2022	2	2022
FTM-35 (AEGIS 5.1, Intercept Flight Test)		3	2022	3	2022
FTM-37 (IOT&E) (AEGIS 5.1, Intercept Flight Test)		3	2022	3	2022
FTX-28 E1 (TH, Target Only Flight Test)		3	2022	3	2022
FTX-28 E2 (TH, Target Only Flight Test)		3	2022	3	2022
FTX-28 E3 (TH, Target Only Flight Test)		3	2022	3	2022
GT-22 Sprint 4 (BMDS Ground Test)		3	2022	3	2022
GTD-22 (E/C) (BMDS Ground Test)		4	2022	4	2022

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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 0603914C / Ballistic Missile Defense Test				Project (Number/Name) MC04 / 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
MC04: Cyber Operations	2.181	2.072	2.479	2.528	-	2.528	2.578	2.631	2.682	2.737	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note N/A												
A. Mission Description and Budget Item Justification The funds in this project sustain Missile Defense Agency DoD Information Assurance Certification and Accreditation Program (DIACAP), Risk Management Framework Standards, Computer Network Defense Service Provider and Controls Validation Testing activities; analysis of validation results; risk assessments and reviews of proposed Program Manager/Information Assurance Manager (PM/IAM) Plans of Action and Milestones (POA&Ms) for MDA Ballistic Missile Defense Test program. It maintains the Certification and Accreditation (C&A) data repository, capturing the DIACAP documentation (artifacts, validation results, and Information Assurance Risk Assessment results, and Designated Approving Authority (DAA) accreditation decisions) and POA&M on all MDA information systems. This project supports the monitoring and tracking of Cybersecurity mitigations detailed in Information Technology security POA&Ms. Activities include preparation of C&A documentation and accreditation recommendations to the MDA Senior Information Assurance Officer/Certification Authority (CA) and DAA. Independent Verification and Validation (IV&V) team actions ensure the availability, integrity, authentication, confidentiality and non-repudiation of the MDA mission, test and administrative systems. Activities in the Project are necessary to comply with the Federal Information Security Management Act (FISMA).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2016	FY 2017	FY 2018	
Title: Network / System Certification and Accreditation (C&A) Articles:									2.072	2.479	2.528	
									-	-	-	
Description: The BMDS Test Network/System Certification and Accreditation program will: - Provide cyber security Program oversight of all MDA Test Directorate (DT) information systems, networks, sponsored remote sites, ground and flight test infrastructure, and exercise/war game infrastructures. This includes management of: cyber security compliance and authorization; cyber security training and awareness; information system secure configuration; assessment and incident management; and computer network defense. - Fund Ballistic Missile Defense Test Program Information Assurance Manager (IAM) civilian salaries. - Conduct cyber security/information assurance engineering and architecture planning for the BMDS Test Program information technology systems. - Plan and test the Information Assurance controls for BMDS. - Develop DT NIST certification and accreditation packages.												
FY 2016 Accomplishments:												

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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 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MC04 / <i>Cyber Operations</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017
Conducted the Network/System Certification and Accreditation program as stated in the Description above.			
<i>FY 2017 Plans:</i> The increase is due to fluctuating contract pricing. -Continuation of the Network/System Certification and Accreditation program as stated in the Description above.			
<i>FY 2018 Plans:</i> Continuation of the Network/System Certification and Accreditation program as stated in the Description above.			
Accomplishments/Planned Programs Subtotals		2.072	2.479
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 0603914C / Ballistic Missile Defense Test				Project (Number/Name) MC04 / Cyber Operations					
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
Network / System Certification and Accreditation (C&A) - Information Assurance	C/IDIQ	Torch Technologies : Various	1.719	1.756	Oct 2015	2.155		2.198	Oct 2017	-		2.198	Continuing	Continuing	Continuing
Network / System Certification and Accreditation (C&A) - Information Assurance Civ	MIPR	MDA : Various	0.462	0.316	Oct 2015	0.324		0.330	Oct 2017	-		0.330	Continuing	Continuing	Continuing
Subtotal			2.181	2.072		2.479		2.528		-		2.528	-	-	-
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			2.181	2.072		2.479		2.528		-		2.528	-	-	-
Remarks N/A															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency														Date: May 2017																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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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 0603914C / <i>Ballistic Missile Defense Test</i>	Project (Number/Name) MC04 / <i>Cyber Operations</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MC04 Cyber Operations	1	2016	4	2022

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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 0603914C / Ballistic Missile Defense Test				Project (Number/Name) MD40 / Program Wide Support			
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: Program Wide Support	62.955	11.884	13.111	14.747	-	14.747	14.323	16.269	16.222	16.014	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 Ballistic Missile Defense Test program. 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 Articles: Description: N/A FY 2016 Accomplishments: N/A FY 2017 Plans: N/A FY 2018 Plans: N/A									11.884	13.111	14.747	
									-	-	-	
Accomplishments/Planned Programs Subtotals									11.884	13.111	14.747	

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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 0603914C / <i>Ballistic Missile Defense Test</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 0603914C / Ballistic Missile Defense Test				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 Operations Management	Allot	Various : Multi: AL, CA, CO, VA	0.211	3.519		0.262	Jul 2017	0.295	Jul 2018	-		0.295	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services	C/CPFF	Various : Multi: AL, CA, CO, VA	61.744	7.315	Dec 2015	12.849	Aug 2017	9.887	Aug 2018	-		9.887	Continuing	Continuing	Continuing
Program Wide Support - Facilities and Maintenance - SRM	MIPR	Various : Multi: AK,AL,CA,VA	1.000	1.050		0.000		4.565	Nov 2017	-		4.565	Continuing	Continuing	Continuing
Subtotal			62.955	11.884		13.111		14.747		-		14.747	-	-	-
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			62.955	11.884		13.111		14.747		-		14.747	-	-	-
Remarks N/A															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Missile Defense Agency															Date: May 2017																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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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 0603914C / <i>Ballistic Missile Defense Test</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