

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>
---	--

COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	1,338.543	447.424	527.563	563.576	-	563.576	471.059	431.349	454.830	462.429	Continuing	Continuing
MT05: <i>BMDS Targets Program</i>	1,302.171	422.612	504.989	539.837	-	539.837	448.238	409.425	431.477	438.049	Continuing	Continuing
MD40: <i>Program Wide Support</i>	36.372	24.812	22.574	23.739	-	23.739	22.821	21.924	23.353	24.380	Continuing	Continuing

Program MDAP/MAIS Code: 362

Note

Increase from FY 2016 to FY 2017 is due to additional target requirements consistent with the Integrated Master Test Plan (IMTP).

A. Mission Description and Budget Item Justification

The Ballistic Missile Defense System (BMDS) Targets Program provides centrally managed targets and countermeasures development and procurement for a cost effective, integrated system-level approach to BMDS testing. The Targets Program has realized past and future savings by centralized competition and management of targets and countermeasures using efficient acquisition strategies and lot buys resulting in economies of scale. Based on engineering assessments of threat intelligence data, the BMDS Targets Program develops, builds, and supports the launch of Short Range Ballistic Missile (SRBM: Less than 1000 Kilometer range) targets, Medium Range Ballistic Missile (MRBM: 1000-3000 Kilometer Range) targets, Intermediate Range Ballistic Missile (IRBM: 3000-5500 Kilometer Range) targets, Intercontinental Ballistic Missile (ICBM: Greater than 5500 Kilometer range) targets, and Multi-Class Components to test, verify, and validate the performance of the BMDS against threats. MDA's BMDS Targets Program provides an economical and reliable inventory of targets which are representative of feasible future threats and support demonstration of the capability of the evolving layered missile defense system in a simultaneous test and operations threat environment.

MD40 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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Missile Defense Agency	Date: February 2016
---	----------------------------

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>
---	--

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	455.068	513.256	585.727	-	585.727
Current President's Budget	447.424	527.563	563.576	-	563.576
Total Adjustments	-7.644	14.307	-22.151	-	-22.151
• Congressional General Reductions	0.000	-0.431			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	14.738			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-0.028	0.000			
• SBIR/STTR Transfer	-7.616	0.000			
• Other Adjustment	0.000	0.000	-22.151	-	-22.151

Change Summary Explanation

The FY 2017 decrease reflects realignment of Department of Defense priorities.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency										Date: February 2016		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>				Project (Number/Name) MT05 / <i>BMDS Targets Program</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
MT05: <i>BMDS Targets Program</i>	1,302.171	422.612	504.989	539.837	-	539.837	448.238	409.425	431.477	438.049	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note
All Budget Project MT05 funds support Ballistic Missile Defense System (BMDS)-Level Testing.

A. Mission Description and Budget Item Justification

The mission of the MDA BMDS Targets program is to provide an economical and reliable inventory of targets that are representative of feasible future threats. These targets enable demonstration of the evolving layered missile defense system capability in operationally realistic scenarios. The BMDS Targets Program develops and acquires three target types across four target classes. The classes include: Short Range Ballistic Missiles (SRBM), Medium Range Ballistic Missiles (MRBM), Intermediate Range Ballistic Missiles (IRBM), and Intercontinental Ballistic Missiles (ICBM). The target types (Type 1-3) designate the complexity of the target within its class. Type-1 targets are simple baseline configurations. Type-2 targets have increased capability or complexity. Type-3 targets have unique configurations. Target requirements are derived from the Critical Engagement Conditions (CECs) and Empirical Measurement Events (EMEs) that are documented in the Agency's Integrated Master Test Plan.

The BMDS Targets Program develops and provides Modified Ballistic Re-Entry Vehicles (MBRV) and Countermeasures that can be used across the spectrum of target types and classes. The BMDS Targets Program provides target digital models that enable MDA weapon system program offices to simulate end to end sensor and interceptor performance during pre-mission analysis. The BMDS Targets Program also provides maintenance, aging surveillance, refurbishment, and routine testing of government furnished equipment boosters and target components.

The BMDS Targets Program carefully plans the year of execution to assure the best use of appropriated funds. However, the BMDS Targets Program must be flexible in its execution of the program in order to respond to emerging real world threats or changes in the intelligence community estimates of when a threat will be deployed. The targets program must also work with BMDS systems engineers on a continuing basis to align the targets program to the BMDS capabilities as reflected in MDA's Integrated Master Test Plan (IMTP). The BMDS Targets Program makes every effort to reduce instability in contracts, production base and budget while managing in this dynamic work environment.

The BMDS Targets Program develops and builds targets and countermeasures at multiple locations including: Courtland, AL; Orlando, FL; Huntsville, AL; and Chandler, AZ. Storage and maintenance facilities are also located throughout the country including: Huntsville, AL; White Sands, NM; Ogden, UT; Tooele, UT; Cape Canaveral Air Force Station, FL, and Courtland, AL.

The BMDS Targets Program consists of four major areas: Consumables, Program Planning and Operations, Resources, and Flight Test Execution.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>Title: Consumables - Short Range Ballistic Missiles (SRBM)</p> <p>Description: Consumables include SRBM target hardware development and manufacturing. The BMDS Targets Program delivers fully assembled and integrated targets to the BMDS Test Program.</p> <p>Target development includes non-recurring engineering, Modified Ballistic Re-Entry Vehicles, Countermeasures, and launch support equipment for BMDS flight testing. Target development provides air, sea, and ground launch capabilities to maximize flexibility in MDA test design. Development activities include requirements decomposition, design, modeling and simulation, qualification testing, and characterization. The BMDS Targets Program Office manages target configuration, component interface specifications, range integration, reliability, mission assurance, and costs. Through the development program, BMDS Targets Program ensures target designs are producible, reliable, and affordable.</p> <p>Target manufacturing includes building targets and target components that are required to execute the BMDS IMTP. Manufacturing includes government furnished equipment and new component acquisition, assembly, and integration. Also included are target characterization, quality and mission assurance, transportation, and logistics support. Future revisions to the IMTP will likely affect target types and quantities noted in the Planned Accomplishments.</p> <p>FY 2015 Accomplishments: -Aegis Readiness Assessment Vehicle-B (ARAV-B) - delivered Ship Sets 11, 12, and 13 to support a successful flight test in the second quarter FY 2015 -ARAV-G - initiated non-recurring engineering development efforts for booster hardware and the re-entry vehicle (RV) nose tip; this will be the first guided ARAV target -Terrier Orion - delivered Ship Sets 1-4 in fourth quarter FY 2015 to support successful flight tests in fourth quarter FY 2015 (Ship Set 2) and first quarter FY 2016 (Ship Sets 1, 3, and 4); delivered Ship Set 5 to inventory -Short Range Air-Launched Target (SRALT) - completed qualification testing and delivered Ship Set 5 to support pre-ship readiness review and flight test in FY 2016 -Foreign Materiel Acquisition-1 (FMA-1) - completed qualification testing and delivered Ship Set 15 to support a flight test in FY 2016</p> <p>FY 2016 Plans: Increase is due to the increased non-recurring engineering and initial hardware purchases for the ARAV-G target, and the initiation of the non-recurring engineering efforts for the Juno target.</p>		18.266	31.109	29.956
Articles:		-	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>-Aegis Readiness Assessment Vehicle-G (ARAV-G) - continue non-recurring engineering development efforts for booster hardware and the re-entry vehicle (RV) nose tip; initiate manufacturing of Ship Sets 1 and 2 to support pre-ship readiness reviews in FY 2017 (Ship Set 1) and FY 2018 (Ship Set 2)</p> <p>-Terrier, Terrier, Oriole-Extended Vehicle (TTO-E) - deliver Ship Sets 1, 3, and 4 to support pre-ship readiness reviews in FY 2016 (Ship Set 1) and FY 2017 (Ship Sets 3 and 4) and flight tests in FY 2016 (Ship Set 1) and FY 2017 (Ship Sets 3 and 4)</p> <p>-Juno - initiate non-recurring engineering development/modification efforts to meet test requirements for flight test in FY 2019</p> <p>-Develop and manufacture additional SRBMs, MBRVs, and Countermeasures, as required by the BMDS IMTP</p> <p>FY 2017 Plans: Decrease is due to the completion of non-recurring engineering efforts for the ARAV-G target.</p> <p>-Aegis Readiness Assessment Vehicle-G (ARAV-G) - deliver Ship Set 1 to support pre-ship readiness review and flight test in FY 2017, continue manufacturing of Ship Set 2 to support pre-ship readiness review and flight test in FY 2018</p> <p>-Juno - continue non-recurring engineering development efforts; initiate hardware purchases for Ship Set 3 to support a pre-ship readiness review in FY 2018 and flight test in FY 2019</p> <p>-Develop and manufacture additional SRBMs, MBRVs, and Countermeasures, as required by the BMDS IMTP</p>				
<p>Title: Consumables - Medium Range Ballistic Missiles (MRBM)</p> <p>Description: Consumables include MRBM target hardware development and manufacturing. The BMDS Targets Program delivers fully assembled and integrated targets to the BMDS Test Program.</p> <p>Target development includes non-recurring engineering, MBRVs, Countermeasures, and launch support equipment for BMDS flight testing. Target development provides air, sea, and ground launch capabilities to maximize flexibility in MDA test design. Development activities include requirements decomposition, design, modeling and simulation, qualification testing, and characterization. The BMDS Targets Program Office manages target configuration, component interface specifications, range integration, reliability, mission assurance, and costs. The BMDS Targets Program ensures target designs are producible, reliable, and affordable.</p> <p>Target manufacturing includes the build of targets and target components that are required to execute the BMDS IMTP. Manufacturing includes government furnished equipment and new component acquisition, assembly, and integration. Also included are target characterization, quality and mission assurance, transportation, and logistics support. Future revisions to the IMTP will likely affect target types and quantities noted in the Planned Accomplishments.</p>		95.265	115.013	138.654
		Articles:	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>Starting in FY 2017, Modified Ballistic Re-Entry Vehicle-7 (MBRV-7) efforts are being transferred to this section from the Consumables - Multi-Class section.</p> <p>FY 2015 Accomplishments: -Extended Medium Range Ballistic Missile (eMRBM) - completed assembly, integration and test of Ship Set 1 to support flight test in FY 2015 -MRBM Type 3 (MRBM T3) - initiated motor delivery and integration in late FY 2015 for Ship Sets 2-4 to support pre-ship readiness reviews in FY 2016 (Ship Set 3 and 4) and FY 2017 (Ship Set 2) -MRBM Type 3 Configuration 2 (MRBM T3C2) - continued source selection activities for three units (MRBM T3 Ship Sets 5-7) -Modified Ballistic Re-entry Vehicle-5 (MBRV-5) - delivered Ship Set 2 to inventory to support a flight test in FY 2018; continued manufacturing of Ship Sets 3 and 4 to support flight tests in FY 2016 (Ship Set 3), FY 2017 (Ship Set 4) -MRBM T1/T2 - continued non-recurring engineering efforts; continued manufacturing of Ship Set 1 to support first target acceptance review in FY 2017 -Extended Long Range Air Launch Target (E-LRALT) - initiated manufacture of Ship Set 2 to support pre-ship readiness review in FY 2017</p> <p>FY 2016 Plans: Increase is due to a full year of Medium Range Ballistic Missile T3C2 effort</p> <p>-MRBM Type 3 (MRBM T3) - deliver Ship Sets 3 and 4 to support pre-ship readiness reviews in FY 2016 and flight tests in FY 2016; continue manufacturing of Ship Set 2 to support a pre-ship readiness review in FY 2017 -MRBM Type 3 Configuration 2 (MRBM T3C2) - initiate non-recurring engineering design and development of MRBM T3C2; initiate manufacture of Ship Set 5 for delivery in FY 2018 -Modified Ballistic Re-entry Vehicle-5 (MBRV-5) - implement Phase II effort for MRBM T3/MBRV-5 Program; deliver Ship Sets 3 and 4 to support flight tests in FY 2016; continue manufacturing Ship Set 2 to support a flight test in FY 2018 -MRBM T1/T2 - continue non-recurring engineering efforts; continue manufacturing of Ship Set 1 to support first target acceptance review in FY 2017 and pre-ship readiness review in FY 2019; initiate long lead purchase and manufacture of Ship Sets 2-6 to support pre-ship readiness reviews in FY 2020 (Ship Set 2), FY 2021 (Ship Sets 3 and 4), FY 2022 (Ship Set 5), and FY 2023 (Ship Set 6) -Extended Long Range Air Launch Target (E-LRALT) - complete qualification testing and prepare Ship Set 2 for delivery to support a planned flight test in FY 2017 -Develop and manufacture additional MRBMs, Re-Entry Vehicles, and Countermeasures, as required by the BMDS IMTP</p> <p>FY 2017 Plans:</p>				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017
<p>Increase is due transfer of funds previously captured in the Consumables - Multi-Class section for the MRBM costs related to the Modified Ballistic Re-Entry Vehicle-7 (MBRV-7) effort and hardware purchases for the Medium Range Ballistic Missile T3C2.</p> <p>-MRBM Type 3 (MRBM T3) - deliver Ship Set 2 to support a pre-ship readiness review in FY 2017</p> <p>-MRBM Type 3 Configuration 2 (MRBM T3C2) - continue non-recurring engineering design and development of MRBM T3C2; continue manufacturing Ship Set 5 for delivery in FY 2018; initiate manufacturing of Ship Set 6 for delivery in FY 2019</p> <p>-MBRV-7 - continue manufacturing Ship Sets 6-9 (4 MBRVs) to support Flight Test Missions in FY 2018, FY 2020, and FY 2021; additional MBRV-7s are needed to meet IMTP requirements and the Government is competing the contract, the Request for Information (RFI) was released to the public in 2015</p> <p>-MRBM T1/T2 - continue non-recurring engineering efforts; continue manufacturing Ship Set 1 to support first target acceptance review in FY 2017 and pre-ship readiness review in FY 2019; continue manufacturing Ship Sets 2-6 to support pre-ship readiness reviews in FY 2020 (Ship Set 2), FY 2021 (Ship Sets 3 and 4), FY 2022 (Ship Set 5), and FY 2023 (Ship Set 6)</p> <p>-Extended Long Range Air Launch Target (E-LRALT) - deliver Ship Set 2 to support pre-ship readiness review and flight test in FY 2017</p> <p>-Develop and manufacture additional MRBMs, Re-Entry Vehicles, and Countermeasures, as required by the BMDS IMTP</p>			
<p>Title: Consumables - Intermediate Range Ballistic Missiles (IRBM)</p> <p align="right">Articles:</p> <p>Description: Consumables include IRBM target hardware development and manufacturing. The BMDS Targets Program delivers fully assembled and integrated targets to the BMDS Test Program.</p> <p>IRBM target development includes non-recurring engineering, MBRVs, Countermeasures, and launch support equipment for BMDS flight testing. Target development provides air, sea, and ground launch capabilities to maximize flexibility in MDA test design. Development activities include requirements decomposition, design, modeling and simulation, qualification testing, and characterization. The BMDS Targets Program Office manages target configuration, component interface specifications, range integration, reliability, mission assurance, and costs. Through the development program, BMDS Targets Program ensures target designs are producible, reliable, and affordable.</p> <p>IRBM target manufacturing includes the build of targets and target components that are required to execute the BMDS IMTP. Manufacturing includes government furnished equipment and new component acquisition, assembly, and integration. Also included are target characterization, quality and mission assurance, transportation, and logistics support. Future revisions to the IMTP will likely affect target types and quantities noted in the Planned Accomplishments.</p>	100.800	92.330	141.986
	-	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>Starting in FY 2017, Modified Ballistic Re-Entry Vehicle-8 (MBRV-8), MBRV-8 Characterization, and Countermeasures efforts associated with the IRBM are being transferred to this section from the Consumables - Multi-Class section.</p> <p>FY 2015 Accomplishments: -IRBM T1/T2 - delivered Ship Sets 1 and 3 to support pre-ship readiness reviews in FY 2015; continued progress on production and missionization of Ship Sets 2 and 4 for delivery and pre-ship readiness reviews in FY 2016 (Ship Set 4) and FY 2017 (Ship Set 2). Initiated production of Ship Sets 5-14 to support pre-ship readiness reviews in FY 2017 (Ship Set 5), FY 2018 (Ship Sets 6-9), FY 2019 (Ship Sets 10-13), and FY 2020 (Ship Set 14). Delivered Countermeasure hardware to support the CTV-02+ Flight Test in FY 2016.</p> <p>FY 2016 Plans: Decrease is due to completion of non-recurring engineering associated with the IRBM T1/T2 target.</p> <p>-IRBM T1/T2 - deliver Ship Set 4 to support pre-ship readiness review in FY 2016; continue manufacturing and integration of Ship Sets 2 and 5-14 to support pre-ship readiness reviews in FY 2017 (Ship Sets 2 and 5), FY 2018 (Ship Sets 6-9), FY 2019 (Ship Sets 10-13), and FY 2020 (Ship Set 14); initiate production of Ship Sets 15-16 to support pre-ship readiness reviews in FY 2021 -Develop and manufacture additional IRBMs, Re-Entry Vehicles, and Countermeasures, as required by the BMDS IMTP</p> <p>FY 2017 Plans: Increase is due transfer of funds previously captured in the Consumables - Multi-Class section for the IRBM costs related to the MBRV-8, MBRV-8 Characterization, and Countermeasures efforts. Additionally, FY 2017 hardware purchases for IRBM T1/T2 Ship Sets 13-16 contributed to the increase over FY 2016.</p> <p>-IRBM T1/T2 - deliver Ship Sets 2 and 5 to support pre-ship readiness reviews and flight tests in FY 2017; continue manufacturing and integration of Ship Sets 6-16 to support pre-ship readiness reviews in FY 2018 (Ship Sets 6-9), FY 2019 (Ship Sets 10-13), FY 2020 (Ship Set 14), and FY 2021 (Ship Sets 15 and 16) -MBRV-8 - deliver Ship Set 2 to support a flight test in FY 2017 and continue manufacturing Ship Sets 4-7 to support flight tests in FY 2018; perform additional characterization on the MBRV-8 -Develop and manufacture additional IRBMs, Re-Entry Vehicles, and Countermeasures, as required by the BMDS IMTP</p>				
Title: Consumables - Intercontinental Ballistic Missiles (ICBM)		47.065	42.264	63.414
		Articles: -	-	-
Description: Consumables include the ICBM target hardware development and manufacturing. The BMDS Targets Program delivers fully assembled and integrated targets to the BMDS Test Program.				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>ICBM target development includes non-recurring engineering, MBRVs, Countermeasures, and launch support equipment for BMDS flight testing. Target development provides air, sea, and ground launch capabilities to maximize flexibility in MDA test design. Development activities include requirements decomposition, design, modeling and simulation, qualification testing, and characterization. The BMDS Targets Program Office manages target configuration, component interface specifications, range integration, reliability, mission assurance, and costs. Through the development program, BMDS Targets Program ensures target designs are producible, reliable, and affordable.</p> <p>ICBM target manufacturing includes the build of targets and target components that are required to execute the BMDS IMTP. ICBM manufacturing includes government furnished equipment and new component acquisition, assembly, and integration. Also included are target characterization, quality and mission assurance, transportation, and logistics support. Future revisions to the IMTP will likely affect target types and quantities noted in the Planned Accomplishments.</p> <p>Starting in FY 2017, MBRV-8, MBRV-8 Characterization, and Countermeasures efforts associated with the ICBM are being transferred to this section from the Consumables - Multi-Class section.</p> <p>FY 2015 Accomplishments: -ICBM T1/T2 - continued non-recurring engineering efforts; completed qualification testing and delivered Ship Set 1 to support pre-ship readiness review in FY 2016; continued manufacturing of Ship Set 2 to support pre-ship readiness review in FY 2018 -Continued integration of the ICBM Ground Test Missile used as a pathfinder for the Concept of Operations</p> <p>FY 2016 Plans: Decrease is due to completion of Non-Recurring Engineering (NRE) and qualification test efforts for the ICBM target.</p> <p>-ICBM T1/T2 - deliver Ship Set 1 for first flight test currently scheduled in the Integrated Master Test Plan for first quarter FY 2017 and deliver Ship Set 2 to support pre-ship readiness review in FY 2017 for flight test in FY 2018; initiate manufacturing of Ship Set 3 to support pre-ship readiness review in FY 2020 -Continue integration of the ICBM Ground Test Missile used as a pathfinder for the Concept of Operations -Develop and manufacture additional ICBMs, Re-Entry Vehicles, and Countermeasures, as required by the BMDS IMTP</p> <p>FY 2017 Plans: Increase is due transfer of funds previously captured in the Consumables - Multi-Class section for the ICBM costs related to the MBRV-8, MBRV-8 Characterization, and Countermeasures efforts.</p> <p>-ICBM T1/T2 - continue manufacturing Ship Set 3 to support pre-ship readiness review in FY 2020; initiate manufacturing of Ship Set 4 and 5 to support pre-ship readiness reviews in FY 2021 and FY 2022</p>				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>-MBRV-8 - deliver Ship Set 3 to support a flight test in FY 2017; continue manufacturing Ship Set 8 to support a flight test in FY 2019; perform additional characterization on the MBRV-8</p> <p>-Continue integration of the ICBM Ground Test Missile used as a pathfinder for the Concept of Operations</p> <p>-Develop and manufacture additional ICBMs, Re-Entry Vehicles, and Countermeasures, as required by the BMDS IMTP</p>				
<p>Title: Consumables - Multi-Class</p> <p align="right">Articles:</p> <p>Description: Consumables includes the development and manufacturing of target hardware. The BMDS Targets Program delivers fully assembled and integrated targets to the BMDS Test Program.</p> <p>Target development includes non-recurring engineering for all four target classes, MBRVs, Countermeasures, and launch support equipment for BMDS flight testing. Target development provides air, sea, and ground launch capabilities to maximize flexibility in MDA test design. Development activities include requirements decomposition, design, modeling and simulation, qualification testing, and characterization. The BMDS Targets Program Office manages target configuration, component interface specifications, range integration, reliability, mission assurance, and costs. Through the development program, BMDS Targets Program ensures target designs are producible, reliable, and affordable.</p> <p>Target manufacturing includes the build of targets and target components that are required to execute the BMDS IMTP. Manufacturing includes government furnished equipment and new component acquisition, assembly, and integration. Also included are target characterization, quality and mission assurance, transportation, and logistics support. Future revisions to the IMTP will likely affect target types and quantities noted in the Planned Accomplishments.</p> <p>FY 2015 Accomplishments:</p> <p>-Modified Ballistic Re-Entry Vehicle-7 (MBRV-7) - delivered Front Section #1, Ship Set #4 (MBRV and Re-entry Vehicle Support Module (RVSM)), and Ship Set #5 (MBRV and RVSM)); Front Section #1 was successfully flown during the FTO-02 E2.1 mission; Ship Set #4 functioned as designed on the FTG-02 E1 mission. Ship Set #5 was successfully integrated with the Intermediate Range Ballistic Missile (IRBM) return-to-flight mission, FTO-02 E2.1a</p> <p>-MBRV-8 - initiated Ship Sets 3 and 4 to support flight tests in FY 2017 (Ship Set 3) and FY 2018 (Ship Set 4)</p> <p>-Continued Associated Object (AO) package deliveries in accordance with Ballistic Missile Defense System Integrated Master Test Plan requirements</p> <p>FY 2016 Plans:</p> <p>Increase is due to initiation of four MBRV-8 Ship Sets to support flight tests in FY 2018 and FY 2019 and the start of Non-Recurring Engineering to support family 4A of the Associated Objects (AO).</p>		49.203	59.224	0.000
		-	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>-Modified Ballistic Re-Entry Vehicle-7 (MBRV-7) - continue manufacturing of Ship Sets 6-7 to support flight tests in FY 2018 and FY 2019; initiate production of Ship Sets 8 and 9 to support flight tests in FY 2019 and FY 2020</p> <p>-MBRV-8 - continue manufacturing of Ship Sets 3 and 4 to support flight tests in FY 2017 (Ship Set 3) and FY 2018 (Ship Set 4); initiate production of Ship Sets 5-8 to support flight tests in FY 2018</p> <p>-Develop and manufacture additional MBRVs and Countermeasures as required by the BMDS IMTP</p> <p>FY 2017 Plans: Beginning in FY 2017, funds previously associated with this R2A Accomplishment are captured in the specific target class they support.</p> <p>-MBRV-7 efforts have been transferred to Consumables - Medium Range Ballistic Missiles (MRBM)</p> <p>-MBRV-8 and MBRV-8 Characterization efforts have been transferred to Consumables - Intermediate Range Ballistic Missiles (IRBM) and Intercontinental Ballistic Missiles (ICBM)</p> <p>-Countermeasures efforts have been transferred to Consumables - Intermediate Range Ballistic Missiles (IRBM) and Intercontinental Ballistic Missiles (ICBM)</p>				
Title: Program Planning & Operations		55.967	63.188	67.373
Description: Program Planning and Operations provides for government management of the Targets program. Included in this effort is program and business management, program administration, technical and testing oversight, verification of hardware and software development, government manpower and infrastructure to develop, test and sustain the BMDS Targets Program Office system and components. Other Government Agency and Federally Funded Research and Development Research Centers are used for highly specialized skill sets not available internal to Targets for specific time periods.		Articles: -	-	-
FY 2015 Accomplishments: -Provided technical and business management support activities, financial management, cost and schedule performance analysis cost estimation and analysis, and integration activities -Provided program management, subcontract management, quality assurance, verification of hardware and software development, and technical and testing oversight -Ensured Targets and Countermeasures program compliance with internal and external direction, policies, and regulations -Conducted Internal Program Plans that align with the Missile Defense Agency (MDA) approved Integrated Master Test Plan (IMTP)				
FY 2016 Plans:				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>Increase over FY 2015 is due to the transfer of Target Launch Operations civilian personnel plus their associated travel and contractor support into this PE from PE 0603914C.</p> <p>-Provide technical and business management support activities, financial management, cost and schedule performance analysis cost estimation and analysis, and integration activities -Provide program management, subcontract management, quality assurance, verification of hardware and software development, and technical and testing oversight -Ensure Targets and Countermeasures program compliance with internal and external direction, policies, and regulations -Conduct Internal Program Plans that align with the Missile Defense Agency (MDA) approved Integrated Master Test Plan (IMTP) -Provide program and technical management of target launch operations activities to include oversight of mission planning, range coordination, and mission requirements.</p> <p>FY 2017 Plans: Increase over FY 2016 is due to the addition of cost sharing for Information Technology (IT) services such as end user support, portal and data services, business automation, and IT consumables.</p> <p>-Provide technical and business management support activities, financial management, cost and schedule performance analysis cost estimation and analysis, and integration activities -Provide program management, subcontract management, quality assurance, verification of hardware and software development, and technical and testing oversight -Ensure Targets and Countermeasures program compliance with internal and external direction, policies, and regulations -Conduct Internal Program Plans that align with the MDA approved IMTP -Provide program and technical management of target launch operations activities to include oversight of mission planning, range coordination, and mission requirements -Provide information technology services to support management of the Targets program</p>				
Title: Resources		56.046	59.474	57.836
		Articles:	-	-
Description: BMDS Target Resources consist of two sub-elements: Systems Engineering/Program Management and Logistics.				
Systems Engineering/Program Management provides technical direction to meet Target Program requirements while balancing cost, schedule, performance, and risk. It conducts functional requirements allocation to product lines, defines product line specifications/interfaces, performs configuration and data management, and follows guidelines for design reviews. It performs target system analysis to verify system performance, defines target program baselines, controls flight test configurations, and				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017
<p>conducts pre and post-flight analysis. It identifies treaty and environmental issues and develops plans for issue resolution. It provides Quality, Safety, and Mission Assurance operations to ensure compliance with Missile Defense Agency requirements for design, test, manufacturing, quality, safety and reliability to ensure high quality products are delivered for test events. It also includes Single Stimulation Framework (SSF)/Objective Stimulation Framework (OSF) compatible Modeling and Simulation execution and improvements to evolve TC Modeling and Simulation capability; trajectory analyses; signature analyses and characterization; studies to assess alternative target and platform solutions; assessments of risk management; and design approval of government furnished equipment.</p> <p>BMDS Targets Program Logistics support provides target storage, aging surveillance, and transportation of TC hardware in support of BMDS testing. Also included are integrated logistics support for facilities, inventory maintenance, spare parts, aging surveillance, disposal, special testing for rocket motor propellants, and other hazardous material handling. This task manages and oversees accountability of all government furnished equipment and contractor acquired property. Logistics also provides common support equipment for launch vehicles, MBRVs, countermeasures, and all up integrated target rounds. It also supports launch site activations through the transportation of support equipment to various test sites.</p> <p><i>FY 2015 Accomplishments:</i> System Engineering and Program Management:</p> <ul style="list-style-type: none"> -Continued Program Management and Business Operations for target components to provide a framework for overall management of the Targets program -Continued providing classified network connections to Other Government Agencies (OGAs) so their subject matter experts can be used to support Target requirements -Continued analyses of future target Launch Vehicles, Re-Entry Vehicles, and launch platforms to ensure they are threat representative and that the Agency is making use of available technology in our future designs -Continued performing Pedigree Reviews to ensure high probability of mission success -Continued information technology and classified network support to ensure sensitive target information is not compromised -Continued Software Independent Verification and Validation (IV&V) to provide risk reduction of flight missions for target systems under development, including the Medium Range Ballistic Missile Type 3 (MRBM T3), Intermediate Range Ballistic Missile (IRBM), and Modified Ballistic Re-Entry Vehicle-5 (MBRV-5) <p>Logistics:</p> <ul style="list-style-type: none"> -Continued Multi-Class Inventory storage, aging surveillance, maintenance of existing assets, and transportation support to ensure availability of Modified Ballistic Re-entry Vehicles and ground support equipment 			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>-Conducted disposal actions of inert assets</p> <p>FY 2016 Plans: Increase in FY 2016 due to Target Resource requirements for the mix of flight tests planned.</p> <p>System Engineering and Program Management:</p> <p>-Continue Program Management and Business Operations for target components to provide a framework for overall management of the Targets program</p> <p>-Continue providing classified network connections to Other Government Agencies (OGAs) so their subject matter experts can be used to support Target requirements</p> <p>-Continue analyses of future target Launch Vehicles, Re-Entry Vehicles, and launch platforms to ensure they are threat representative and that the Agency is making use of available technology in our future designs</p> <p>-Continue performing Pedigree Reviews to ensure high probability of mission success</p> <p>-Continue information technology and classified network support to ensure sensitive target information is not compromised</p> <p>-Continue Software Independent Verification and Validation (IV&V) to provide risk reduction of flight missions for target systems under development, including the Intermediate Range Ballistic Missile (IRBM) and Modified Ballistic Re-Entry Vehicle-5 (MBRV-5)</p> <p>Logistics:</p> <p>-Continue Multi-Class Inventory storage, aging surveillance, maintenance of existing assets, and transportation support to ensure availability of Modified Ballistic Re-entry Vehicles and ground support equipment</p> <p>-Conduct disposal actions of inert assets</p> <p>FY 2017 Plans: Decrease in FY 2017 due to Target Resource requirements for the mix of flight tests planned.</p> <p>Continuation of FY 2016 Plans.</p>				
Title: Flight Test Execution		0.000	42.387	40.618
		Articles: -	-	-
Description: Flight Test Execution is performed by the Target Launch Operations group. This group conducts target mission planning, coordinates target range and mission requirements, and provides target technical information to the Missile Defense Agency's General Counsel to support treaty approvals. The Target Launch Operations Group is the primary link between the				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2015	FY 2016	FY 2017
<p>target developer and the Ballistic Missile Defense System test community, incorporating target system constraints into the BMDS mission countdown and launch constraints.</p> <p>FY 2015 Accomplishments: N/A</p> <p>FY 2016 Plans: Increase from FY 2015 to FY 2016 due to transfer of Target Launch Operations into this PE from to PE 0603914C.</p> <ul style="list-style-type: none"> -Conduct a Ground-Based Midcourse Defense (GMD) 3-stage Capability Enhancement II (CE-II) interceptor characterization test with an air-launched Intermediate Range Ballistic Missile (IRBM) target -Conduct a Ground-Based Midcourse Defense (GMD) 3-stage CE-II Configuration 2 (C2)/Consolidated Booster Avionics Upgrade (CBAU) CE-II BIK I Exoatmospheric Kill Vehicle (EKV) Ground-Based Interceptor engagement of a InterContinental Ballistic Missile (ICBM) target -Conduct an Aegis BMD Baseline 9.C2 (5.1) SM-3 BIK IIA missile simulated engagement of a Medium Range Ballistic Missile (MRBM) target -Conduct an Aegis BMD Baseline 9.C2 (5.1) SM-3 BIK IIA missile engagement of a Medium Range Ballistic Missile (MRBM) target -Conduct target test engineering, mission logistics, and launch operations with consistent test expertise to support operational and developmental flight testing across the Ballistic Missile Defense System Targets Program in accordance with the Integrated Master Test Plan (IMTP) in various test Major Range and Test Facilities (MRTF). -Conduct mission planning and range coordination activities, perform final target system integration and execute target missions, provided communications security equipment and management for Ballistic Missile Defense System Flight Test events <p>FY 2017 Plans: Decrease from FY 2016 due to mix of flight tests in the Agency's Integrated Master Test Plan.</p> <ul style="list-style-type: none"> --Conduct final target integration with the test range and accomplish launch operations of an ICBM target (First Flight Target) in support of a Ground-Based Midcourse Defense (GMD) 3-stage CE-II Configuration 2 (C2)/Consolidated Booster Avionics Upgrade (CBAU) CE-II BIK I Exoatmospheric Kill Vehicle (EKV) Ground-Based Interceptor engagement Conduct final target integration with the test range and accomplish launch operations of an ICBM target in support of a GMD salvo engagement of a 3-stage Heritage CE-II and a 3-stage Heritage CE-I GBI -Conduct final target integration with the test range and accomplish launch operations of a MRBM target in support of an Aegis BMD Baseline 9.C1 SM-6 Dual Interceptor salvo engagement -Conduct final target integration with the test range and accomplish launch operations of a MRBM target in support of an Aegis BMD SM-3 Launch on Remote engagement 				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017
<ul style="list-style-type: none"> -Conduct final target integration with the test range and accomplish launch operations of a MRBM target in support of an Aegis BMD Baseline 9.C2 SM-3 Block IIA engagement -Conduct final target integration with the test range and accomplish launch operations of one MRBM target and one SRBM target in support of a THAAD TH3.0.0 endo-atmospheric engagement -Conduct final target integration with the test range and accomplish launch operations of an air launched IRBM target in support of GMD simulated engagement through Weapons Task Plan (WTP) -Conduct final target integration with the test range and accomplish launch operations of a SRBM target in support of an Aegis BMD Baseline 9.C2 simulated engagement -Conduct final target integration with the test range and accomplish launch operations of a SRBM target in support of an Aegis BMD Baseline 9.C2 SM-6 Dual Interceptor engagement -Conduct target test engineering and launch operations with consistent test expertise to support operational and developmental flight testing across the BMDS Targets Program in accordance with the IMTP in various test Major Range and Test Facilities (MRTF). -Conduct mission planning and range coordination activities, perform final target system integration and execute target missions, provided communications security equipment and management for Ballistic Missile Defense System Flight Test events 			
Accomplishments/Planned Programs Subtotals	422.612	504.989	539.837

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

N/A

Remarks

D. Acquisition Strategy

The MDA BMDS Targets Program provides for the development and purchase of ballistic missile targets and countermeasures for the BMDS in support of the MDA's flight test program. The BMDS Targets Program requirements are derived from the BMDS IMTP.

The BMDS Targets and Countermeasures Program Acquisition Strategy is based on three premises. The first is to utilize existing capabilities. The second is to initiate new development if there is no existing capability using firm-fixed price contracts with incentive fee based on cost, schedule and performance. The third premise is to use cost reimbursable contracts with incentive fee based on cost, schedule, and performance for new development that has high-risk.

MDA BMDS Targets Program competitively awarded a prime contract to Lockheed Martin Space Systems Company (LMSSC) for development of the Flexible Target Family (FTF). SRBM, MRBM, and IRBM targets, as well as MBRVs, are procured using this contract. Hardware purchases will remain on existing contract and launch services and engineering services have been broken out into a follow-on contract. The follow-on launch and engineering services contract was awarded via a sole-source fixed price contract.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>
<p>MDA BMDS Targets Program competitively awarded a prime contract to Orbital Sciences Corporation air-launched IRBM targets. This award included two follow-on options; one for eight IRBM targets (exercised) and another for one to six IRBM targets.</p> <p>MDA BMDS Targets Program conducted a limited competition and awarded a contract modification to Orbital Sciences Corporation for development of ICBM targets. This award included two ICBM Stage Zero Kits to be used with an existing air-launched IRBM target.</p> <p>The United States Air Force competitively awarded a contract to L-3 Communications/Coleman Aerospace to provide one air-launched medium range ballistic missile and one air-launched short range ballistic missile. Execution of the contract elements for this effort was transferred to the Missile Defense Agency.</p> <p>MDA BMDS Targets Program competitively awarded a prime contract to L-3 Communications/Coleman Aerospace (Coleman) to provide 6 MRBM targets. This award includes one follow-on option, for up to six additional MRBM targets.</p> <p>The Solid Rocket Motor Technical Services Contract was competitively awarded to Alliant Tech Systems in May 2005 and provides aging and surveillance, refurbishment, transportation, testing, and sensitivity studies for MDA BMDS Targets Program solid rocket motors to include A3, C4, Orbus 1/1A, GEM, and Castor IV variants. A follow-on sole source contract was awarded 30 September 2011.</p> <p>The Aegis Readiness Assessment Vehicle (ARAV) target effort is managed by MDA BMDS Targets Program and the Naval Surface Warfare Center Port Hueneme Division White Sands (NSWC PHD WS). NSWC PHD WS has unique sounding rocket expertise and access to existing contracts managed by White Sands Missile Range that makes this a beneficial relationship for both parties. MDA BMDS Targets Program provides targets funding via Military Interdepartmental Purchase Orders that NSWC PHD WS expends on its hardware development and engineering contracts. In addition, MDA BMDS Targets Program provides funding to Sandia National Labs in support of the Attitude Control Module (ACM) development effort for the ARAV Group C target. NSWC PHD WS manages the integration of the ACM onto the launch vehicle. The MDA BMDS Test Program (Program Element 0603914C) is responsible for funding all launch services of these targets in support of the IMTP for FY 2015. Beginning in FY 2016 all targets launch service funds to support the IMTP will be transferred into this Program Element (0603915C).</p> <p>MDA BMDS Targets Program is currently in various stages of planning or execution for procurement of ballistic missile targets by range class: SRBM, MRBM, IRBM, and ICBM. These targets will be procured using a Target Performance Specification to support flight test requirements as identified in the IMTP. Each target class will be solicited, evaluated, and competitively awarded independently in IMTP "need date" priority order.</p> <p>Within each target class, capabilities are further segregated and designated as a class type. Type 1, Type 2, and Type 3 capabilities are defined as follows:</p> <p>Type 1: A Type 1 target is the baseline (simple) configuration for the class. A Type 1 target satisfies the minimum target requirements to provide the baseline capability for each target class. The baseline configuration represents the complete vehicle stack-up and includes: 1-n boosters, attitude control system, test object, flight termination system, housekeeping and environmental instrumentation, and telemetry. For example, the basic configuration of an LV-2 target is representative of a Type 1 configuration in the intermediate range class.</p>		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>
<p>Type 2: A Type 2 target requires more advanced or complex performance capabilities. Type 2 capabilities may be included in the baseline Type 1 configuration or provided as configuration kits that can be added to the baseline configuration. Type 2 kits may include the following: countermeasures and associated deployment capability, enhanced targeting and aim point accuracies, selectable booster and test object dynamics, tailored separation debris, temperature sensors, hit location and miss distance instrumentation, onboard sensors, deployable fly along sensors, and/or lethality payloads. For example, the LV-2 target with countermeasures or additional payloads is representative of a Type 2 configuration in the intermediate range class.</p> <p>Type 3: A Type 3 target is a unique configuration procured in low unit quantities. Type 3 targets encompass unique threat characteristics or test conditions (i.e. Ground Based Midcourse Defense high velocity engagement scenario) not achievable with a Type 1 or Type 2 configuration.</p> <p>E. Performance Metrics N/A</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets				MT05 / BMDS Targets Program							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
Consumables - Short Range Ballistic Missiles (SRBM) - 1	C/CPAF	L3 Communications/ Coleman Aerospace : Orlando, FL	17.342	10.299		2.616	Nov 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Short Range Ballistic Missiles (SRBM) - 2	MIPR	Naval Surface Warfare Center, Port Hueneme : Port Hueneme, CA	22.889	7.467		25.743	Nov 2015	10.168	Nov 2016	-		10.168	Continuing	Continuing	Continuing
Consumables - Short Range Ballistic Missiles (SRBM) - 3	MIPR	Aviation and Missile Research, Development, and Engineering Center : Huntsville, AL	0.000	0.117		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Short Range Ballistic Missiles (SRBM) - 4	MIPR	Redstone Test Center : Huntsville, AL	0.000	0.129		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Short Range Ballistic Missiles (SRBM) - 5	MIPR	Missile and Space Information Center : Huntsville, AL	0.000	0.254		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Short Range Ballistic Missiles (SRBM) - 6	C/CPAF	Juno Target : TBD	0.000	0.000		2.750	Jul 2016	19.788	Nov 2016	-		19.788	Continuing	Continuing	Continuing
Consumables - Short Range Ballistic Missiles (SRBM) - 7	C/CPAF	Lockheed Martin Space Systems Company : Courtland, AL	20.965	0.000		0.000		0.000		-		0.000	0	20.965	20.965
Consumables - Short Range Ballistic Missiles (SRBM) - 8	C/CPAF	Orbital Sciences Corporation : Chandler, AZ	4.192	0.000		0.000		0.000		-		0.000	0	4.192	4.192
Consumables - Short Range Ballistic Missiles (SRBM) - 9	C/CPIF	Lockheed Martin Space Systems Company : Courtland, AL	3.282	0.000		0.000		0.000		-		0.000	0	3.282	3.282

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)						Project (Number/Name)					
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets						MT05 / BMDS Targets Program					
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
Consumables - Medium Range Ballistic Missiles (MRBM) - 1	C/CPAF	Lockheed Martin Space Systems Company : Courtland, AL	329.256	49.911		33.580	Nov 2015	19.133	Nov 2016	-		19.133	Continuing	Continuing	Continuing
Consumables - Medium Range Ballistic Missiles (MRBM) - 2	C/CPAF	L3 Communications/ Coleman Aerospace : Orlando, FL	77.128	39.283		57.390	Nov 2015	37.355	Nov 2016	-		37.355	Continuing	Continuing	Continuing
Consumables - Medium Range Ballistic Missiles (MRBM) - 3	MIPR	Naval Surface Warfare Center, Dahlgren Division : Dahlgren, VA	0.000	0.362		0.119	Nov 2015	0.058	Nov 2016	-		0.058	Continuing	Continuing	Continuing
Consumables - Medium Range Ballistic Missiles (MRBM) - 4	FFRDC	Johns Hopkins University/Applied Physics Lab : Baltimore, MD	0.000	0.452		0.000		0.000		-		0.000	0	0.452	0
Consumables - Medium Range Ballistic Missiles (MRBM) - 5	MIPR	White Sands Missile Range : White Sands, NM	0.000	0.016		0.380	Nov 2015	0.184	Nov 2016	-		0.184	Continuing	Continuing	Continuing
Consumables - Medium Range Ballistic Missiles (MRBM) - 6	MIPR	Pacific Missile Range Facility : Barking Sands, HI	0.000	0.009		0.208	Nov 2015	0.101	Nov 2016	-		0.101	Continuing	Continuing	Continuing
Consumables - Medium Range Ballistic Missiles (MRBM) - 7	MIPR	Space and Missile Defense Command : Huntsville, AL	0.000	0.740		1.078	Nov 2015	0.000		-		0.000	0	1.818	0
Consumables - Medium Range Ballistic Missiles (MRBM) - 8	C/CPAF	MRBM RFP : TBD	0.500	4.492		22.258	Nov 2015	81.792	Nov 2016	-		81.792	Continuing	Continuing	Continuing
Consumables - Medium Range Ballistic Missiles (MRBM) - 9	MIPR	Defense Information Systems Agency : Fort Meade, MD	0.000	0.000		0.000		0.031	Nov 2016	-		0.031	Continuing	Continuing	Continuing
Consumables - Intermediate Range	C/CPAF	Orbital Sciences Corporation : Chandler, AZ	220.947	100.717		92.330	Nov 2015	97.438	Nov 2016	-		97.438	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets				MT05 / BMDS Targets Program							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
Ballistic Missiles (IRBM) - 1															
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 2	MIPR	White Sands Missile Range : White Sands, NM	0.000	0.030		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 3	MIPR	US Army Yuma Proving Ground : Yuma, AZ	0.000	0.053		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 4	C/CPAF	Lockheed Martin Space Systems Company : Courtland, AL	27.417	0.000		0.000		16.598	Nov 2016	-		16.598	Continuing	Continuing	Continuing
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 5	C/CPAF	Lockheed Martin Space Systems Company : United Kingdom	0.000	0.000		0.000		9.390	Nov 2016	-		9.390	Continuing	Continuing	Continuing
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 6	C/CPAF	Countermeasures RFP : TBD	0.000	0.000		0.000		3.709	Nov 2016	-		3.709	Continuing	Continuing	Continuing
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 7	C/CPAF	MBRV-8 Characterization RFP : TBD	0.000	0.000		0.000		4.690	Nov 2016	-		4.690	Continuing	Continuing	Continuing
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 8	MIPR	US Army Garrison - Natick : Natick, MA	0.000	0.000		0.000		0.036	Nov 2016	-		0.036	Continuing	Continuing	Continuing
Consumables - Intermediate Range Ballistic Missiles (IRBM) - 9	C/CPAF	Future MBRV RFP : TBD	0.000	0.000		0.000		10.125	Nov 2016	-		10.125	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)						Project (Number/Name)					
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets						MT05 / BMDS Targets Program					
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
Consumables - Intercontinental Ballistic Missiles (ICBM) - 1	C/CPAF	Orbital Sciences Corporation : Chandler, AZ	88.305	43.072		32.335	Nov 2015	26.823	Nov 2016	-		26.823	Continuing	Continuing	Continuing
Consumables - Intercontinental Ballistic Missiles (ICBM) - 10	C/CPAF	Lockheed Martin Space Systems Company : Courtland, AL	0.000	0.000		0.000		11.848	Nov 2016	-		11.848	Continuing	Continuing	Continuing
Consumables - Intercontinental Ballistic Missiles (ICBM) - 11	FFRDC	Massachusetts Institute of Technology, Lincoln Labs : Lexington, MA	0.000	0.000		0.000		11.172	Nov 2016	-		11.172	Continuing	Continuing	Continuing
Consumables - Intercontinental Ballistic Missiles (ICBM) - 12	C/CPAF	MBRV-X RFP : TBD	0.000	0.000		0.000		9.690	Nov 2016	-		9.690	Continuing	Continuing	Continuing
Consumables - Intercontinental Ballistic Missiles (ICBM) - 2	C/CPFF	Alliant Techsystems : Magna, UT	0.000	3.688		3.771	Nov 2015	3.801	Nov 2016	-		3.801	Continuing	Continuing	Continuing
Consumables - Intercontinental Ballistic Missiles (ICBM) - 3	MIPR	Defense Financial and Accounting Service : Indianapolis, IN	0.000	0.000		2.656	Nov 2015	0.000		-		0.000	0	2.656	0
Consumables - Intercontinental Ballistic Missiles (ICBM) - 4	MIPR	Naval Air Weapons Station : China Lake, CA	0.000	0.077		0.448	Nov 2015	0.080	Nov 2016	-		0.080	Continuing	Continuing	Continuing
Consumables - Intercontinental Ballistic Missiles (ICBM) - 5	MIPR	Naval Surface Warfare Center, Dahlgren Division : Dahlgren, VA	0.000	0.000		0.071	Nov 2015	0.000		-		0.000	0	0.071	0
Consumables - Intercontinental Ballistic Missiles (ICBM) - 6	MIPR	Pacific Missile Range Facility : Barking Sands, HI	0.000	0.000		0.107	Nov 2015	0.000		-		0.000	0	0.107	0
Consumables - Intercontinental Ballistic Missiles (ICBM) - 7	MIPR	Redstone Garrison : Huntsville, AL	0.000	0.000		0.040	Nov 2015	0.000		-		0.000	0	0.040	0

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets				MT05 / BMDS Targets Program							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
Consumables - Intercontinental Ballistic Missiles (ICBM) - 8	MIPR	Reagan Test Site : Kwajalein Atoll	0.000	0.000		2.836	Nov 2015	0.000		-		0.000	0	2.836	0
Consumables - Intercontinental Ballistic Missiles (ICBM) - 9	MIPR	US Army Yuma Proving Ground : Yuma, AZ	0.000	0.228		0.000		0.000		-		0.000	0	0.228	0
Consumables - Multi-Class - 1	C/CPAF	Lockheed Martin Space Systems Company : Courtland, AL	130.943	33.853		38.407	Nov 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Multi-Class - 2	C/CPAF	Lockheed Martin Space Systems Company : United Kingdom	13.900	4.289		3.281	Nov 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Multi-Class - 3	FFRDC	Massachusetts Institute of Technology, Lincoln Labs : Lexington, MA	8.164	3.800		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Multi-Class - 4	FFRDC	Sandia National Laboratories : Albuquerque, NM	6.774	1.352		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Multi-Class - 5	MIPR	Redstone Test Center : Huntsville, AL	0.000	0.050		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Consumables - Multi-Class - 6	C/CPAF	Associated Objects RFP : TBD	0.000	5.859		17.536	Dec 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Program Planning & Operations - Program Planning and Operations - 1	C/CPAF	Targets TEAMS Support : Huntsville, AL	94.192	27.643		30.292	Nov 2015	34.579	Nov 2016	-		34.579	Continuing	Continuing	Continuing
Program Planning & Operations - Program Planning and Operations - 10	MIPR	Missile Defense Agency : Huntsville, AL	62.975	23.510		28.293	Oct 2015	28.688	Oct 2016	-		28.688	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)						
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets					MT05 / BMDS Targets Program						
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 & Operations - Program Planning and Operations - 12	C/FFP	Network Management Resources : Chantilly, VA	0.273	1.003		0.707	Nov 2015	0.866	Nov 2016	-		0.866	Continuing	Continuing	Continuing
Program Planning & Operations - Program Planning and Operations - 6	FFRDC	Johns Hopkins University, Applied Physics Lab : Baltimore, MD	1.210	0.568		0.581	Nov 2015	0.586	Nov 2016	-		0.586	Continuing	Continuing	Continuing
Program Planning & Operations - Program Planning and Operations - 7	MIPR	US Army Aviation & Missile Command : Huntsville, AL	3.265	1.080		0.930	Nov 2015	0.000		-		0.000	0	5.275	0
Program Planning & Operations - Program Planning and Operations - 8	MIPR	Aviation & Missile Research, Dev & Eng Center : Huntsville, AL	3.093	1.393		1.803	Nov 2015	0.000		-		0.000	0	6.289	0
Program Planning & Operations - Program Planning and Operations - 9	MIPR	US Air Force Space & Missile Systems Center (SMC) : Albuquerque, NM	2.241	0.770		0.582	Nov 2015	2.654	Nov 2016	-		2.654	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 1	C/CPAF	Lockheed Martin Space Systems Company : Courtland, AL	19.595	7.836		8.850	Nov 2015	7.861	Nov 2016	-		7.861	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 11	MIPR	Naval Surface Warfare Center : Crane, IN	3.548	0.258		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 12	MIPR	Redstone Arsenal Garrison : Huntsville, AL	3.142	0.039		0.040	Nov 2015	0.040	Nov 2016	-		0.040	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 16	MIPR	US Property & Fiscal Office for Arizona : Phoenix, AZ	4.664	1.901		0.429	Nov 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 17	MIPR	US Army White Sands Missile	0.538	0.000		0.000		0.518	Nov 2016	-		0.518	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets				MT05 / BMDS Targets Program							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
		Range : White Sands, NM													
Resources - Resources/ Logistics - 18	MIPR	Defense Finance & Accounting Service : Indianapolis, IN	1.726	0.684		0.317	Nov 2015	0.323	Nov 2016	-		0.323	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 2	C/CPFF	Alliant Techsystems, Inc. (ATK) : Magna, UT	0.790	0.000		0.000		0.255	Nov 2016	-		0.255	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 20	C/FFP	Wyle Laboratories : Huntsville, AL	0.544	0.362		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 21	MIPR	US Air Force Space & Missile Systems Center (SMC) : Albuquerque, NM	2.897	5.026		9.867	Nov 2015	3.813	Nov 2016	-		3.813	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 23	C/FFP	Venturi Aerospace : Huntsville, AL	0.189	1.926		0.000		0.026	Nov 2016	-		0.026	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 24	C/FFP	TASC, Inc. : Albuquerque, NM	5.600	0.775		0.792	Nov 2015	0.767	Nov 2016	-		0.767	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 25	MIPR	Tooele Army Depot : Tooele, UT	1.122	0.000		0.000		0.049	Nov 2016	-		0.049	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 3	C/FFP	Aerojet Corporation : Albuquerque, NM	0.342	0.248		0.253	Nov 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 34	C/CPFF	Inuteq, Corp. : Beltsville, MD	0.000	0.791		0.730	Nov 2015	0.755	Nov 2016	-		0.755	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 35	MIPR	Space and Naval Warfare Systems Command : San Diego, CA	0.000	0.000		0.000		0.022	Nov 2016	-		0.022	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 36	MIPR	Tobyhanna Army Depot : Tobyhanna, PA	0.000	0.000		0.000		1.089	Nov 2016	-		1.089	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 4	C/FFP	Alliant Techsystems, Inc. (ATK) : Magna, UT	5.171	0.203		0.000		0.000		-		0.000	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets				MT05 / BMDS Targets Program							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
Resources - Resources/ Logistics - 5	MIPR	Aviation & Missile Research, Dev & Eng Center : Huntsville, AL	6.034	1.417		1.448	Nov 2015	0.284	Nov 2016	-		0.284	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 6	MIPR	Hill Air Force Base : Ogden, UT	3.827	0.121		0.000		2.030	Nov 2016	-		2.030	Continuing	Continuing	Continuing
Resources - Resources/ Logistics - 7	MIPR	Missile Defense Agency : Huntsville, AL	5.985	0.918		0.938	Oct 2015	0.197	Oct 2016	-		0.197	Continuing	Continuing	Continuing
Resources - Resources/ Systems Engineering - 1	C/CPAF	Lockheed Martin Space Systems Company : Courtland, AL	55.312	15.542		17.042	Nov 2015	17.392	Nov 2016	-		17.392	Continuing	Continuing	Continuing
Resources - Resources/ Systems Engineering - 10	FFRDC	Sandia National Laboratories : Albuquerque, NM	3.340	0.509		0.520	Dec 2015	0.549	Dec 2016	-		0.549	Continuing	Continuing	Continuing
Resources - Resources/ Systems Engineering - 14	MIPR	Naval Air Warfare Center : Point Mugu, CA	0.772	1.614		1.650	Nov 2015	1.913	Nov 2016	-		1.913	Continuing	Continuing	Continuing
Resources - Resources/ Systems Engineering - 15	MIPR	Missile Defense Agency : Huntsville, AL	0.000	0.000		0.000		1.715	Oct 2016	-		1.715	Continuing	Continuing	Continuing
Resources - Resources/ Systems Engineering - 2	FFRDC	Aerospace Corporation : El Segundo, CA	8.777	2.779		2.540	Nov 2015	2.632	Nov 2016	-		2.632	Continuing	Continuing	Continuing
Resources - Resources/ Systems Engineering - 6	FFRDC	Johns Hopkins University, Applied Physics Lab : Baltimore, MD	1.168	0.765		0.782	Nov 2015	0.798	Nov 2016	-		0.798	Continuing	Continuing	Continuing
Resources - Resources/ Systems Engineering - 7	MIPR	US Air Force Space & Missile Systems Center (SMC) : Albuquerque, NM	0.904	4.091		4.183	Nov 2015	4.871	Nov 2016	-		4.871	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)						
0400 / 4				PE 0603915C / Ballistic Missile Defense Targets					MT05 / BMDS Targets Program						
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
Resources - Resources/ Systems Engineering - 8	MIPR	Aviation & Missile Research, Dev & Eng Center : Huntsville, AL	26.931	8.241		9.093	Nov 2015	9.937	Nov 2016	-		9.937	Continuing	Continuing	Continuing
Flight Test Execution - 1	MIPR	Missile Defense Agency : Huntsville, AL	0.000	0.000		0.382	Oct 2015	0.374	Oct 2016	-		0.374	Continuing	Continuing	Continuing
Flight Test Execution - 10	MIPR	Hickam Field : Pearl Harbor, HI	0.000	0.000		0.205	Nov 2015	0.184	Nov 2016	-		0.184	Continuing	Continuing	Continuing
Flight Test Execution - 11	MIPR	Redstone Army Airfield : Redstone Arsenal, AL	0.000	0.000		0.019	Nov 2015	0.019	Nov 2016	-		0.019	Continuing	Continuing	Continuing
Flight Test Execution - 12	MIPR	Redstone Test Center : Huntsville, AL	0.000	0.000		0.115	Nov 2015	0.111	Nov 2016	-		0.111	Continuing	Continuing	Continuing
Flight Test Execution - 13	C/CPAF	Orbital Sciences Corporation : Chandler, AZ	0.000	0.000		2.488	Nov 2015	2.072	Nov 2016	-		2.072	Continuing	Continuing	Continuing
Flight Test Execution - 14	MIPR	Naval Air Warfare Center : Pt. Mugu, CA	0.000	0.000		0.429	Nov 2015	0.436	Nov 2016	-		0.436	Continuing	Continuing	Continuing
Flight Test Execution - 2	MIPR	Defense Finance and Accounting Services : Indianapolis, IN	0.000	0.000		11.388	Nov 2015	11.052	Nov 2016	-		11.052	Continuing	Continuing	Continuing
Flight Test Execution - 3	MIPR	Pacific Missile Range Facility : Barking Sands, HI	0.000	0.000		11.281	Nov 2015	11.607	Nov 2016	-		11.607	Continuing	Continuing	Continuing
Flight Test Execution - 4	MIPR	Reagan Test Site : Kwajalein Atoll	0.000	0.000		7.124	Nov 2015	6.031	Nov 2016	-		6.031	Continuing	Continuing	Continuing
Flight Test Execution - 5	MIPR	Edwards Air Force Base : Lancaster, CA	0.000	0.000		6.332	Nov 2015	6.102	Nov 2016	-		6.102	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>
--	--	--

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Flight Test Execution - 6	MIPR	US Army Yuma Proving Ground : Yuma, AZ	0.000	0.000		0.285	Nov 2015	0.298	Nov 2016	-		0.298	Continuing	Continuing	Continuing
Flight Test Execution - 7	MIPR	Eglin Air Force Base : Eglin AFB, FL	0.000	0.000		0.137	Nov 2015	0.167	Nov 2016	-		0.167	Continuing	Continuing	Continuing
Flight Test Execution - 8	C/CPAF	L3 Communications/ Coleman Aerospace : Orlando, FL	0.000	0.000		1.727	Nov 2015	1.666	Nov 2016	-		1.666	Continuing	Continuing	Continuing
Flight Test Execution - 9	MIPR	Air Force Research Laboratory : Wright Patterson AFB, OH	0.000	0.000		0.475	Nov 2015	0.499	Nov 2016	-		0.499	Continuing	Continuing	Continuing
Subtotal			1,302.171	422.612		504.989		539.837		-		539.837	-	-	-

Remarks
N/A

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-		-	-	-	-

Remarks
N/A

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-		-	-	-	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>
--	--	--

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

Remarks
N/A

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-		-	-	-	-

Remarks
N/A

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1,302.171	422.612	504.989	539.837	-	539.837	-	-	-

Remarks
N/A

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 11)	▲																											
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 12)	▲																											
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 13)	▲																											
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 1)		▲																										
SRALT (SRBM) Pre-Ship Readiness Review (Ship Set 5)			▲																									
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 3)				▲																								
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 15)				▲																								
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 1)				▲																								
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 2)				▲																								
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 3)				▲																								
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 4)				▲																								
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 5)				▲																								
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)					▲																							
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 3)						△																						
LV-2 Pre-Ship Readiness Review (Ship Set 6)							△																					
ICBM Pre-Ship Readiness Review (Ship Set 1)								△																				
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 4)									△																			
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 1)										△																		
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 4)											△																	

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ELRALT Pre-Ship Readiness Review (Ship Set 2)																												
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 2)											▲																	
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 2)												▲																
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 3)												▲																
ARAV-G (SRBM) Pre-Ship Readiness Review (Ship Set 1)												▲																
ICBM Pre-Ship Readiness Review (Ship Set 2)													▲															
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 5)													▲															
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 6)														▲														
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 7)														▲														
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 8)															▲													
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 9)															▲													
MRBM Type 3/Configuration 2 Pre-Ship Readiness Review (Ship Set 5)															▲													
ARAV-G (SRBM) Pre-Ship Readiness Review (Ship Set 2)															▲													
Juno (SRBM) Pre-Ship Readiness Review (Ship Set 3)															▲													
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 10)																						▲						
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 11)																						▲						
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 5)																						▲						
MRBM Type 3/Configuration 2 Pre-Ship Readiness Review (Ship Set 6)																						▲						
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 1)																						▲						

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 12)																			△									
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 13)																			△									
ICBM Pre-Ship Readiness Review (Ship Set 3)																					△							
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 14)																						△						
Juno (SRBM) Pre-Ship Readiness Review (Ship Set 4)																						△						
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 2)																							△					
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 3)																										△		
ICBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)																											△	
MRBM Type 3/Configuration 2 Pre-Ship Readiness Review (Ship Set 7)																												△
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 15)																												△
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 16)																												△
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)																												△

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 11)	1	2015	1	2015
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 12)	1	2015	1	2015
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 13)	1	2015	1	2015
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 1)	2	2015	2	2015
SRALT (SRBM) Pre-Ship Readiness Review (Ship Set 5)	3	2015	3	2015
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 3)	4	2015	4	2015
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 15)	4	2015	4	2015
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 1)	4	2015	4	2015
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 2)	4	2015	4	2015
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 3)	4	2015	4	2015
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 4)	4	2015	4	2015
Terrier Orion (SRBM) Pre-Ship Readiness Review (Ship Set 5)	4	2015	4	2015
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)	1	2016	1	2016
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 3)	2	2016	2	2016
LV-2 Pre-Ship Readiness Review (Ship Set 6)	3	2016	3	2016
ICBM Pre-Ship Readiness Review (Ship Set 1)	4	2016	4	2016
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 4)	4	2016	4	2016
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 1)	4	2016	4	2016
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 4)	1	2017	1	2017
ELRALT Pre-Ship Readiness Review (Ship Set 2)	1	2017	1	2017
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 2)	2	2017	2	2017
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 2)	3	2017	3	2017

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>
--	--	--

Events	Start		End	
	Quarter	Year	Quarter	Year
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 3)	3	2017	3	2017
ARAV-G (SRBM) Pre-Ship Readiness Review (Ship Set 1)	3	2017	3	2017
ICBM Pre-Ship Readiness Review (Ship Set 2)	4	2017	4	2017
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 5)	4	2017	4	2017
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 6)	2	2018	2	2018
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 7)	2	2018	2	2018
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 8)	4	2018	4	2018
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 9)	4	2018	4	2018
MRBM Type 3/Configuration 2 Pre-Ship Readiness Review (Ship Set 5)	4	2018	4	2018
ARAV-G (SRBM) Pre-Ship Readiness Review (Ship Set 2)	4	2018	4	2018
Juno (SRBM) Pre-Ship Readiness Review (Ship Set 3)	4	2018	4	2018
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 10)	2	2019	2	2019
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 11)	2	2019	2	2019
ARAV-TTO-E (SRBM) Pre-Ship Readiness Review (Ship Set 5)	2	2019	2	2019
MRBM Type 3/Configuration 2 Pre-Ship Readiness Review (Ship Set 6)	2	2019	2	2019
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 1)	3	2019	3	2019
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 12)	3	2019	3	2019
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 13)	3	2019	3	2019
ICBM Pre-Ship Readiness Review (Ship Set 3)	1	2020	1	2020
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 14)	2	2020	2	2020
Juno (SRBM) Pre-Ship Readiness Review (Ship Set 4)	2	2020	2	2020
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 2)	3	2020	3	2020
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 3)	2	2021	2	2021
ICBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)	2	2021	2	2021
MRBM Type 3/Configuration 2 Pre-Ship Readiness Review (Ship Set 7)	2	2021	2	2021

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MT05 / <i>BMDS Targets Program</i>
--	--	--

Events	Start		End	
	Quarter	Year	Quarter	Year
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 15)	2	2021	2	2021
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 16)	2	2021	2	2021
MRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)	3	2021	3	2021

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MD40 / <i>Program Wide Support</i>
--	--	--

COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
MD40: <i>Program Wide Support</i>	36.372	24.812	22.574	23.739	-	23.739	22.821	21.924	23.353	24.380	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2016, Program Wide Support (PWS) reflects a proportional change as a result of a decrease in Ballistic Missile Defense Targets and in FY 2017, PWS reflects a proportional change as a result of an increase in Ballistic Missile Defense Targets.
 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 2015	FY 2016	FY 2017
Title: Program Wide Support	24.812	22.574	23.739
Articles:	-	-	-
Description: N/A			
FY 2015 Accomplishments: See paragraph A: Mission Description and Budget Item Justification			
FY 2016 Plans: See paragraph A: Mission Description and Budget Item Justification			
FY 2017 Plans: - See paragraph A: Mission Description and Budget Item Justification			
Accomplishments/Planned Programs Subtotals	24.812	22.574	23.739

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</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

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>	Project (Number/Name) MD40 / <i>Program Wide Support</i>
--	--	--

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Wide Support - Agency Facilities and Maintenance (MIPR)	MIPR	Various Multi : AL, CO, CA, VA etc.	8.118	11.860		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Facilities and Maintenance (Reqn)	Reqn	Various Multi : AL, CO, CA, VA etc.	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Infrastructure Support (MIPR)	MIPR	Various; Multi : AL, VA	16.484	10.753		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Infrastructure Support (FFP)	C/FFP	Northrop Grumman; Multi : AL, VA	9.460	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations Management	Allot	Various; Multi : AL, CA, CO, VA	1.687	0.525		0.000		0.509	Jul 2017	-		0.509	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services	C/CPFF	Various : Multi:AL, CA, CO, VA	0.000	0.000		5.560	Nov 2015	8.029	Aug 2017	-		8.029	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support, International, and Materiel and Readiness	MIPR	Various Multi: : AK, AL, CA, CO, HI, VA	0.623	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations, Sustainment and GPC	Allot	Various, Multi : AL, CO, CA, VA etc	0.000	1.674		1.500	Dec 2015	1.500	Sep 2017	-		1.500	Continuing	Continuing	Continuing
Program Wide Support - Facilities and Maintenance SRM	MIPR	Various : Multi: AK, AL, CA, VA	0.000	0.000		15.514	Jan 2016	13.701	Jan 2017	-		13.701	Continuing	Continuing	Continuing
Subtotal			36.372	24.812		22.574		23.739		-		23.739	-	-	-

Remarks
N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Missile Defense Agency								Date: February 2016					
Appropriation/Budget Activity 0400 / 4				R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</i>				Project (Number/Name) MD40 / <i>Program Wide Support</i>					
	Prior Years	FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	36.372	24.812		22.574		23.739		-		23.739	-	-	-

Remarks

N/A

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Missile Defense Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</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 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
MD40 Program-Wide Support					☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆				

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Missile Defense Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0603915C / <i>Ballistic Missile Defense Targets</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	2020

UNCLASSIFIED

THIS PAGE INTENTIONALLY LEFT BLANK

UNCLASSIFIED