

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	497.550	435.747	495.257	-	495.257	516.092	406.611	481.527	463.660	Continuing	Continuing
MT05: <i>BMDS Targets Program</i>	-	497.550	414.696	468.713	-	468.713	490.430	385.732	454.847	437.866	Continuing	Continuing
MD40: <i>Program Wide Support</i>	-	0.000	21.051	26.544	-	26.544	25.662	20.879	26.680	25.794	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

N/A

A. Mission Description and Budget Item Justification

The BMDS Targets Program Element (PE) 0603915C (transferred from PE 0603888C) includes the Targets Program and, beginning in FY 2013, a portion of Program-Wide Support.

As part of the total Ballistic Missile Defense System (BMDS), the BMDS Targets Program provides centrally managed targets and countermeasures development and procurement for a cost effective, integrated system-level test approach. The BMDS 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 and cost savings. Based on the systems engineering assessments of threat intelligence, the BMDS Program Element develops, builds, and supports the launch of Short Range Ballistic Missile (SRBM: Less than 100Km range) targets, Medium Range Ballistic Missile (MRBM: 1000-3000 Km Range) targets, Intermediate Range Ballistic Missile (IRBM: 3000-5500 Km Range) targets, Intercontinental Ballistic Missile (ICBM: Greater than 5500 km range) targets, and Multi-Class Components to test, verify, and validate the performance of the BMDS against feasible threat signatures. The Missile Defense Agency (MDA) BMDS Targets Program provides an economical and reliable inventory of targets which are representative of feasible future threats and demonstrate 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 costs in support of the MDA functions and activities across the entire Ballistic Missile Defense System (BMDS).

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Missile Defense Agency	DATE: April 2013
-----------------------------------------------------------------------------------------	-------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	454.357	435.747	475.175	-	475.175
Current President's Budget	497.550	435.747	495.257	-	495.257
Total Adjustments	43.193	0.000	20.082	-	20.082
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	43.193	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustment	0.000	0.000	20.082	-	20.082

Change Summary Explanation

FY 2014 funding was realigned from Program Element 0603914C to fully fund modified requirements of Integrated Master Test Plan based on fact-of-life adjustments to Missile Defense Agency's test program.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MT05: <i>BMDS Targets Program</i>	-	497.550	414.696	468.713	-	468.713	490.430	385.732	454.847	437.866	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

All Budget Project MT05 funds support BMDS-Level Testing.

A. Mission Description and Budget Item Justification

The mission of the Missile Defense Agency (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 four target 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.

The BMDS Targets Program develops and provides Multi-Class Components 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. 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 builds targets and countermeasures at multiple locations including: Courtland, AL; Orlando, FL; Chandler, AZ; and Albuquerque, NM. Storage and maintenance facilities are also located throughout the country including: Huntsville, AL; White Sands, NM; Ogden, UT; Camp Navajo, AZ; Hawthorne, NV; Tooele, UT; Courtland, AL; and Kodiak, AK.

The BMDS Targets Program consists of three major areas: Target Hardware, Program Operations, and Target Support.

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

	FY 2012	FY 2013	FY 2014
Title: Target Hardware	376.613	281.356	367.057
Articles:	0	0	0
Description: Target Hardware includes the development and manufacturing of target hardware. The BMDS Targets Program delivers fully assembled and integrated targets to BMDS Test Program, who executes target launch operations.			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>		PROJECT MT05: <i>BMDS Targets Program</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012
<p>Target development includes the non-recurring engineering (NRE) for all four target classes, Multi-Class Components (associated objects and reentry vehicles), and ground support systems that support 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 hardware manufacturing includes the build of targets and target components that are required to execute the Missile Defense Agency (MDA) Integrated Master Test Plan (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 2012 Accomplishments: Short Range Ballistic Missiles (SRBM):</p> <ul style="list-style-type: none"> -Medium Range Target (MRT) Ground - Delivered Ship Set 10 to support FTT-12 (THAAD Intercept Flight Test) -Aegis Readiness Assessment Vehicle-C (ARAV-C) - Delivered Ship Set 1 to support FTM-19 (Aegis Intercept Flight Test) ;continued development of Ship Sets 4-5 to support pre-ship readiness reviews in FY 2013 and FY 2014, respectively -Aegis Readiness Assessment Vehicle-B (ARAV-B) - Delivered Ship Set 10 to support FTI-01 (FTO-01 Risk Reduction Flight Test); initiated development of Ship Sets 11-13, 16, and 17 to support future flight test requirements -Aegis Readiness Assessment Vehicle-A (ARAV-A) - Delivered Ship Set 8 to support FTM-16 E2a (Aegis Intercept Flight Test) and Ship Set 9 to support FY 2013 flight test; initiated development of Ship Sets 10-12 to support pre-ship readiness review in FY 2013 -Foreign Materiel Acquisition-1 (FMA-1) - Delivered Ship Set 10 to support FTM-18 (Aegis Intercept Flight Test) -Foreign Materiel Acquisition-2 (FMA-2) - Delivered Ship Set 3 to support FTT-12 (THAAD Intercept Flight Test) -Continued development of all other SRBMs in support of the current IMTP <p>Medium Range Ballistic Missile (MRBM):</p> <ul style="list-style-type: none"> -Extended Medium Range Ballistic Missile (eMRBM) - Continued development of Ship Set 1 to support pre-ship readiness review in FY 2013; initiated development of Ship Sets 2-5 to support future flight test requirements -Extended Long Range Air Launch Target (ELRALT) - Delivered Ship Set 1 to support FTI-01 (FTO-01 Risk Reduction Flight Test); continued development of Ship Set 2 to support future flight test requirements 				
				FY 2013
				FY 2014

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>		PROJECT MT05: <i>BMDs Targets Program</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012
<p>-MRBM Type 3 (MRBM T3) - Continued development of Ship Set 1 to support pre-ship readiness review in FY 2014; initiated development of Ship Sets 2-4 to support future flight test requirements -Continued development of all other MRBMs in support of the current IMTP</p> <p>Intermediate Range Ballistic Missile (IRBM):</p> <p>-Launch Vehicle 2 (LV-2) - Continued development of Ship Set 4 to include qualification testing to support pre-ship readiness review in FY 2013 -IRBM T1/T2 - Continued development of Ship Sets 1 thru 6 to support future flight test requirements -Continued development of all other IRBMs in support of the current Integrated Master Test Plan (IMTP)</p> <p>Intercontinental Ballistic Missile (ICBM):</p> <p>-Initiated development of Ship Set 1 to include target development efforts that provided for the non-recurring engineering (NRE) to support BMDs flight testing</p> <p>Multi-Class Components:</p> <p>-Continued development of Modified Ballistic Re-Entry Vehicle-5 (MBRV-5) to include build of the Attitude Control Module (ACM) to support planned FY 2014 production unit deliveries -Continued development of MBRV-7 to include build of the separation system to support planned deliveries of Extended Medium Range Ballistic Missile Ship Sets 1 and 2 in FY 2013 -Continued development of MBRV-8 to include completion of the Re-Entry Vehicle Separation Module (RVSM) to support initial delivery in FY 2013 -Continued development of Associated Object packages to support requirements of the Integrated Master Test Plan -Continued other Counter Measures/Associated Objects Non-Recurring Engineering that included the United Kingdom Project Agreement -Continued development of all other re-entry vehicles, associated objects, and motors in support of the current Integrated Master Test Plan</p> <p>FY 2013 Plans: Target requirements are delineated in the Missile Defense Agency (MDA) Integrated Master Test Plan (IMTP). Future revisions to the IMTP will likely affect target types and quantities noted in the Planned Accomplishments.</p>				FY 2013
				FY 2014

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency	DATE: April 2013
--------------------------------------------------------------------------------------	-------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDs Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
<p>Multi-Class Components: Develop, build, and support common payloads and components, re-entry vehicles, booster motors, and associated objects to support the manufacturing of targets for SRBM, MRBM, IRBM, and ICBM. Specifically, the funds are used for non-recurring engineering (NRE) and recurring engineering to:</p> <ul style="list-style-type: none"> -Initiate/continue development and delivery of Modified Ballistic Re-Entry Vehicle-2 (MBRV-2) -Initiate/continue development and delivery of MBRV-5 -Initiate/continue development and delivery of MBRV-7 -Initiate/continue development and delivery of MBRV-8 -Initiate/continue development and delivery of Attitude Control Module (ACM) -Counter Measures/Associated Objects Non-Recurring Engineering to include Objects for Intermediate Range Ballistic Missile (IRBM) target, and the United Kingdom Project Agreement -Initiate/ continue development of all other Re-entry Vehicles, Associated Objects, and Motors in support of the current Integrated Master Test Plan. <p>Intermediate Range Ballistic Missile (IRBM): Specifically, target development efforts provide for the non-recurring engineering (NRE) and recurring development of IRBM launch vehicles to support BMDs flight testing. Efforts include requirements decomposition, design, qualification testing, characterization, and build. This supports the MDA objective to demonstrate the intermediate range ballistic missile threat and capabilities.</p> <ul style="list-style-type: none"> -IRBM T1/T2 - Initiate/continue development of Ship Sets 1 thru 16 -Initiate/continue development of all other IRBMs in support of the current Integrated Master Test Plan (IMTP) <p>Medium Range Ballistic Missile (MRBM): Specifically, target development efforts provide for the non-recurring engineering (NRE) and recurring development of MRBM launch vehicles to support BMDs flight testing. Efforts include requirements decomposition, design, qualification testing, characterization, and build. This supports the MDA objective to demonstrate the medium range ballistic missile threat and capabilities.</p> <ul style="list-style-type: none"> -Extended Medium Range Ballistic Missile (eMRBM) - Initiate/continue development of Ship Sets 1-5 -Extended Long Range Air Launch Target (E-LRALT) - Initiate/continue development of Ship Set 2 -MRBM Type 3 (MRBM T3) - Initiate/continue development of Ship Sets 1-4 -Initiate/continue development of all other MRBMs in support of the current Integrated Master Test Plan (IMTP) <p>Short Range Ballistic Missiles (SRBM): Specifically, target development efforts provide for the non-recurring engineering (NRE) and recurring development of SRBM launch vehicles to support BMDs flight testing. Efforts include requirements decomposition, design, qualification testing, characterization, and build. This supports the MDA objective to demonstrate the short range ballistic missile threat and capabilities.</p> <ul style="list-style-type: none"> -Short Range Air-Launched Target (SRALT) - Initiate/continue development of Ship Set 3 			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>		PROJECT MT05: <i>BMDs Targets Program</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012
<p>-Aegis Readiness Assessment Vehicle-C (ARAV-C) - Initiate/continue development of Ship Sets 4-6</p> <p>-Aegis Readiness Assessment Vehicle-B (ARAV-B) - Initiate/continue development of Ship Sets 9, 11-15</p> <p>-Aegis Readiness Assessment Vehicle-A (ARAV-A) - Initiate/continue development of Ship Sets 10-12</p> <p>-Foreign Materiel Acquisition-1 (FMA-1) - Initiate/continue development of Ship Set 12</p> <p>-Strypi - Initiate/continue development of Ship Set 1</p> <p>-Initiate/continue development of all other SRBMs in support of the current Integrated Master Test Plan (IMTP)</p> <p>Intercontinental Ballistic Missile (ICBM): Specifically, target development efforts provide for the non-recurring engineering (NRE) to support BMDs flight testing.</p> <p>Variance Analysis: FY 2013 budget decreases from FY 2012 due to decrease in non-recurring engineering costs and long-lead hardware procurement associated with Intermediate Range Ballistic Missile targets, Medium Range Ballistic Missile targets, and common components.</p> <p>FY 2014 Plans:</p> <p>Short Range Ballistic Missiles (SRBM):</p> <p>-Aegis Readiness Assessment Vehicle-C (ARAV-C) - deliver Ship Sets 6 and 7 to include initiation of the Attitude Control Module (ACM) build (18 month long-lead item) to support pre-ship readiness reviews in FY 2016</p> <p>-Aegis Readiness Assessment Vehicle-B (ARAV-B) - deliver Ship Set 14 to support pre-ship readiness review in FY 2014, and continue manufacture of Ship Set 15 to include motor certification and mission design review to support pre-ship readiness review FY 2016</p> <p>-Foreign Materiel Acquisition-1 (FMA-1) - continue modification of Ship Set 12 to include instrumentation qualification and cable runs to support pre-ship readiness review in FY 2015</p> <p>-Continue development and manufacture of all other SRBMs in support of the current Integrated Master Test Plan</p> <p>Medium Range Ballistic Missile (MRBM):</p> <p>-Extended Medium Range Ballistic Missile (eMRBM) - deliver Ship Set 3 to include completion of Assembly, Integration and Test (AI&T) to support pre-ship readiness review in FY 2014, complete modules for Ship Set 4 to support pre-ship readiness review in FY 2015, and complete modules for Ship Set 5 to support pre-ship readiness review in FY 2016</p> <p>-MRBM Type 3 (MRBM T3) - deliver Ship Sets 1-3 to include AI&T to support pre-ship readiness reviews in FY 2014, continue development of Ship Set 4 to include qualification testing to support pre-ship readiness review in FY 2015</p>				FY 2013
				FY 2014

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>		PROJECT MT05: <i>BMDS Targets Program</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>-MRBM T1/T2 - continue development of Ship Sets 1-2 to include qualification testing to support pre-ship readiness reviews in FY 2015, and continue development of Ship Sets 3-7 to include acquisition of long-lead items to support pre-ship readiness reviews in FY 2016</p> <p>-Continue development of all other MRBMs in support of the current Integrated Master Test Plan</p> <p>Intermediate Range Ballistic Missile (IRBM):</p> <p>-IRBM T1/T2 - deliver Ship Sets 1-4 to include qualification testing and AI&T to support pre-ship readiness reviews in FY 2014, continue manufacture of Ship Sets 5-12 and deliver booster hardware to inventory to support the IMTP</p> <p>-Continue development of all other IRBMs in support of the current Integrated Master Test Plan</p> <p>Intercontinental Ballistic Missile (ICBM):</p> <p>-Begin integration of the ICBM Ground Test Missile used as a pathfinder for the Concept of Operations</p> <p>-Develop and initiate AI&T for Ship Set 1 to complete in FY 2015</p> <p>Multi-Class Components:</p> <p>-Deliver final Modified Ballistic Re-Entry Vehicle-2 (MBRV-2)</p> <p>-Continue development and delivery of MBRV-5 to include build of Integrated Electronics Module (IEM) and aeroshells with planned threat representative demo performance in FY 2014</p> <p>-Continue development of MBRV-7 to include build of IEM and aeroshells with deliveries planned for FY 2014 to support Extended Medium Range Ballistic Missile Ship Sets 3 and 4</p> <p>-Continue development and delivery of MBRV-8 with planned pre-ship readiness review in FY 2014</p> <p>-Continue Associated Object (AO) Type 2 development with initial delivery and pre-ship readiness review in FY 2014 to support IRBM T1/T2 Ship Set 1</p> <p>-Continue Counter Measures/Associated Objects Non-Recurring Engineering to include the United Kingdom Project Agreement</p> <p>-Continue development of all other Re-entry Vehicles, Associated Objects, and Motors in support of the current Integrated Master Test Plan.</p>				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>		PROJECT MT05: <i>BMDS Targets Program</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Increases due to non-recurring engineering and long-lead hardware purchases associated with Short Range Ballistic Missile targets and Medium Range Ballistic Missile targets.				
Title: Program Operations		59.019	59.840	62.844
		Articles: 0	0	0
<p>Description: Program 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, quality/safety/mission assurance, integrated logistics support, and government manpower and infrastructure to develop, test and sustain the BMDS Targets Program Office system and components.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> -Provided technical and business management support activities, financial management, cost and schedule performance analysis cost estimation and analysis, configuration management 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 Baseline Reviews that align with the Missile Defense Agency (MDA) approved baselines -Continued a Mission Assurance and Manufacturing Engineering Program to include Quality, Configuration Management, Manufacturing, Engineering, Security, and Safety -Provided Quality Safety and Mission Assurance operations to ensure compliance with Agency requirements for design, test, manufacturing, quality, safety and reliability to ensure high quality products are delivered for BMDS test events <p>FY 2013 Plans:</p> <p>Program Operations consist of the government, contractor and Federally Funded Research and Development Center (FFRDC) workforce that manages the overall Targets and Countermeasures (TC) program, to include competition of new MRBM contracts, engineering, logistics, program management, business management, acquisition, contract administration, and quality assurance. The personnel for TC enable the program to develop, build, and evaluate targets that respond to the changing threat and meet the requirements in the Integrated Master Test Plan. These personnel include the following:</p> <ul style="list-style-type: none"> -MDA Civilians in the following functional areas: Acquisition Management; Business and Financial Management; Contracts; Administrative Services; Engineering; Readiness; Safety, Quality and Mission Assurance; Security; and Test -Other Government Agency (OGA) Civilians to provide support in the following functional areas: Business and Financial Management; Engineering; Logistics; Safety, Quality, and Mission Assurance; and Security -Travel for Government Civilians 				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>-Missile Defense Agency Engineering and Support Services (MiDAESS) contractor support in the following functional areas: Acquisition Management; Business and Financial Management; Contracts; Administrative Services; Engineering; Readiness; Safety, Quality, and Mission Assurance; Security; and Test</p> <p>-FFRDCs, Intergovernmental Personnel Act (IPAs), University Affiliated Research Center (UARC) staff, Detailees, and Liaisons to support the TC program office in Engineering</p> <p>-Operations support to include Change of Station requirements and Student Loan Repayments</p> <p>FY 2014 Plans:</p> <p>-Provide technical and business management support activities, financial management, cost and schedule performance analysis cost estimation and analysis, configuration management and integration activities</p> <p>-Provide program management, subcontract management, quality assurance, verification of hardware and software development, and technical and testing oversight</p> <p>-Ensure Targets and Countermeasures program compliance with internal and external direction, policies, and regulations</p> <p>-Conduct Internal Baseline Reviews that align with the Missile Defense Agency (MDA) approved baselines</p> <p>-Continue a Mission Assurance and Manufacturing Engineering Program to include Quality, Configuration Management, Manufacturing, Engineering, Security, and Safety</p> <p>-Provide Quality Safety and Mission Assurance operations to ensure compliance with Agency requirements for design, test, manufacturing, quality, safety and reliability to ensure high quality products are delivered for BMDS test events</p>				
Title: Target Support		61.918	73.500	38.812
		Articles: 0	0	0
<p>Description: BMDS Target Program Support consists of two sub-elements. These are Systems Engineering/Program Management and Logistics.</p> <p>System engineering/program management provides target program technical direction to meet program requirements while balancing cost, schedule, performance, and risk. It conducts functional requirements allocation to product lines, defines product line specifications/interfaces, and follows guidelines for design reviews. It performs target system analysis to verify system performance, defines target program baselines, controls flight test configurations, and conducts pre and post-flight analysis. It identifies treaty and environmental issues and develops plans for issue resolution. 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 and mission assurance; and design approval of government furnished equipment.</p>				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>		PROJECT MT05: <i>BMDS Targets Program</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012
<p>BMDS Targets Program logistics support provides the Missile Defense Agency (MDA) with 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, re-entry vehicles, associated objects, 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 2012 Accomplishments:</i> System Engineering and Program Management: Performed program management and systems engineering functions including: specialty and production engineering; acquisition, production, logistics management; modeling and simulation; and tests.</p> <ul style="list-style-type: none"> -Continued Program Management and Business Operations for target components to provide a framework for the overall management of the Targets program -Continued Information Technology support for Other Government Agencies (OGAs) so that subject matter experts can be used to support Target requirements -Continued Special Studies and associated analyses of future target Launch Vehicles, Re-Entry Vehicles, and launch platforms to ensure representative of feasible future threats; technology is being incorporated into the Targets program -Continued Quality/Mission Assurance to include 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) for targets including the Extended Medium Range Ballistic Missile (eMRBM), Launch Vehicle-2 (LV-2), Air-Launched Intermediate Range Ballistic Missile (IRBM), and Medium Range Ballistic Missile Type 3 (MRBM T3) to provide risk reduction of flight missions -Continued MDA Engineering Directorate to ensure targets are representative of feasible future threats -Performed prime contractor program management and systems engineering functions including: specialty and production engineering; acquisition, production, logistics management; modeling and simulation; and tests <p>Logistics:</p> <ul style="list-style-type: none"> -Continued C4 Motors storage, disposal, transportation, aging surveillance, and static fire support in order to sustain Launch Vehicle-2 (LV-2) -Continued Castor IVB sustainment and storage costs in order to support Medium Range Targets (MRT) -Continued Lance Missile sustainment, telemetry van sustainment and facilities sustainment costs 				
				FY 2013
				FY 2014

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>		PROJECT MT05: <i>BMDS Targets Program</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>-Continued Orbus 1A missile sustainment support to maintain the capability to build Extended Long Range Air Launch Targets (E-LRALT)</p> <p>-Continued Minuteman Motors storage, disposal, transportation, aging surveillance, and static fire costs in order to maintain the capability to build Extended Medium Range Ballistic Missile (eMRBM) and MRBM Type 3 targets</p> <p>-Continued Multi-Class Inventory storage, aging surveillance, and transportation support to ensure availability of Re-entry Vehicles (RVs) and ground support equipment</p> <p>-Continued Multi-Class Vehicle support, ordnance inventory reduction planning, small ordnance, x-ray, refurbishment, transportation, and modification costs</p> <p>-Continued Castor IVA, GEM-40, and M-57 motor storage, transportation, and disposal</p> <p>-Initiated modification to expand the missile assembly building at Courtland, Alabama</p> <p>FY 2013 Plans:</p> <p>System Engineering and Program Management: Perform program management and systems engineering functions including: specialty and production engineering; acquisition, production, logistics management; modeling and simulation; and tests.</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 Information Technology support for Other Government Agencies (OGAs) so that subject matter experts can be used to support Target requirements</p> <p>-Continue Special Studies and associated analyses of future target Launch Vehicles, Re-Entry Vehicles, and launch platforms to ensure representative of feasible future threats; technology is being incorporated into the Targets program</p> <p>-Continue Quality/Mission Assurance to include 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) for targets, including the Extended Medium Range Ballistic Missile (eMRBM), Launch Vehicle-2 (LV-2), Air-Launched Intermediate Range Ballistic Missile (IRBM), and Medium Range Ballistic Missile Type 3 (MRBM T3), to provide risk reduction of flight missions</p> <p>-Continue MDA Engineering Directorate targets and countermeasures requirements support to ensure targets accurately represent the threat</p> <p>-Perform prime contractor program management and systems engineering functions including: specialty and production engineering; acquisition, production, logistics management; modeling and simulation; and tests</p> <p>Logistics and Sustainment: Provides maintenance, transportation, utilities, storage, license fees, aging surveillance, disposal and material handling for targets, target components, re-entry rebuilds, associated objects, and support equipment. Targets and Countermeasures utilizes storage to acquire and preserve existing booster motors and other target hardware from DoD inventory to build future targets with existing, flight qualified components, which help reduce future development and manufacturing costs to include:</p>				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 Targets Program</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>-C4 Motors - Storage, disposal, transportation, aging surveillance, and static fire support</p> <p>-Castor IVA - Storage support</p> <p>-Castor IVB - Storage support</p> <p>-M-57 - Storage, disposal, transportation, and aging surveillance support</p> <p>-Orbus 1A - Missile sustainment support</p> <p>-SR-19 - Storage, disposal, transportation, aging surveillance, and static fire support</p> <p>-Multi-Class Inventory storage, aging surveillance, and transportation support</p> <p>-Multi-Class Other - Vehicle support, ordnance inventory reduction planning, small ordnance, x-ray, refurbishment, transportation, and modification support</p> <p>-Complete modification to expand the missile assembly building at Courtland, Alabama</p> <p>Variance Analysis: FY 2013 budget increases from FY 2012 due to \$17.9 million of FY 2012 funds being executed in Budget Project MD05 in Program Element 0603888C.</p> <p>FY 2014 Plans:</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 Information Technology support for Other Government Agencies (OGAs) so that subject matter experts can be used to support Target requirements</p> <p>-Continue Special Studies and associated analyses of future target Launch Vehicles, Re-Entry Vehicles, and launch platforms to ensure representative of feasible future threats; technology is being incorporated into the Targets program</p> <p>-Continue Quality/Mission Assurance to include 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) for targets, including the Extended Medium Range Ballistic Missile (eMRBM), Launch Vehicle-2 (LV-2), Air-Launched Intermediate Range Ballistic Missile (IRBM), Medium Range Ballistic Missile Type 1 and Type 2 (MRBM T1/T2), and Medium Range Ballistic Missile Type 3 (MRBM T3), to provide risk reduction of flight missions</p> <p>-Continue MDA Engineering Directorate targets and countermeasures requirements support to ensure targets accurately represent the threat</p> <p>-Perform prime contractor program management and systems engineering functions including: specialty and production engineering; acquisition, production, logistics management; modeling and simulation; and tests</p> <p>Logistics:</p>				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
<p>-Continue C4 Motors storage, disposal, transportation, aging surveillance, and static fire support in order to sustain Launch Vehicle-2 (LV-2)</p> <p>-Continue Minuteman Motors storage, transportation, aging surveillance, technical expertise, and static fire support to maintain the capability to build Extended Medium Range Ballistic Missile (eMRBM) and MRBM Type 3 targets</p> <p>-Continue Multi-Class Inventory storage, aging surveillance, and transportation support to ensure availability of Re-entry Vehicles (RVs) and ground support equipment</p> <p>-Continue modifications to expand missile assembly buildings in support of target integration operations</p> <p>Variance Analysis: Decreases due to decreased target types, disposal, and storage efficiencies in support of the Integrated Master Test Plan.</p>			
Accomplishments/Planned Programs Subtotals	497.550	414.696	468.713

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

Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 0603888C: <i>Ballistic Missile Defense Test & Targets</i>	88.162	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	88.162

Remarks

D. Acquisition Strategy

The Missile Defense Agency (MDA) BMDS Targets Program provides for the development and purchase of ballistic missile targets and countermeasures for the Ballistic Missile Defense System in support of the Missile Defense Agency's flight test program. The BMDS Targets Program requirements are derived from the Agency's Integrated Master Test Plan (IMTP).

Based on the Acquisition Plan for MDA's Prime Contract, MDA BMDS Targets Program competed and awarded a prime contract to Lockheed Martin Space Systems Company (LMSSC) on 9 December, 2003 for the development of the Flexible Target Family (FTF). Short Range Ballistic Missile targets, Medium Range Ballistic Missile targets, and Intermediate Range Ballistic Missile targets, as well as reentry vehicles are procured using this contract.

Since the award of this base contract, MDA BMDS Targets Program has refined its acquisition strategies and signed new contracts to improve on this baseline.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDs Targets Program</i>
<p>Based on the MDA BMDs Targets Program Medium Range Targets (MRT) Acquisition Plan, the MDA BMDs Targets Program awarded a sole source firm fixed price contract to the Orbital Sciences Corporation ground launched Medium Range Target/Re-Entry Vehicle (MRT/RV) targets in June 2008. This award was based upon the requirement for target consistency resulting in a unique target/RV configuration to support testing of the Aegis Weapon System. A total of three targets were procured on this contract.</p> <p>Based on MDA`s Acquisition Plan (3 November 2009), MDA BMDs Targets Program competitively awarded a prime contract to Orbital Sciences Corporation on 7 March 2011 for the design and development (cost plus award fee) and delivery (fixed-price incentive fee) of eight air-launched Intermediate Range Ballistic Missile (IRBM) targets. This award includes two follow-on options; one for eight IRBM targets and one for one to six IRBM targets.</p> <p>The Sounding Rocket Program 3 (SRP-3) contract is managed by the US Air Force Space and Missile Systems Center, Space Development and Test Directorate at Kirtland AFB, NM to provide air launched target systems. The SRP-3 contract has 4 prequalified vendors (Orbital Sciences Corp, Alliant Tech Systems, L-3 Communications/Coleman Aerospace (Coleman), and Space Vector Corp) that are able to compete for new task orders to develop targets on this contract. To date, Coleman is the only vendor that has been awarded task orders on this contract.</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 (Integrated Master Test Plan) IMTP.</p> <p>MDA BMDs Targets Program is currently in various stages of planning or execution for procurement of ballistic missile targets by range class: Short Range (SRBM), Medium Range (MRBM), Intermediate Range (IRBM), and Intercontinental Range (ICBM). These targets will be procured using a Target Performance Specification to support flight test requirements as identified in the Integrated Master Test Plan. Each target class will be solicited, evaluated, and competitively awarded independently in IMTP ``need date`` priority order.</p>		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>
<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> <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>BMDS Targets Program is in the process of transitioning from a ``just-in-time`` approach to delivering unique targets to meet specific flight test requirements to more of a production based strategy geared towards building an inventory of product lines able to meet multiple test requirements at substantially lower costs. Work under existing contracts/orders will run to completion rather than being transitioned to a new contractor(s).</p> <p>Future targets may be procured under the new acquisition competitive Request for Proposals unless the new acquisitions would result in higher cost, delivery delays, or less capable targets. MDA BMDS Targets Program will procure pre and post mission planning, data products, support to modeling and simulation and ground test, inventory sustainment and management, and flight test execution.</p> <p>E. Performance Metrics N/A</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Target Hardware - Target Hardware/ICBM - 1	C/CPAF	Orbital Sciences Corporation:Chandler, AZ	0.000	6.347		9.718	Nov 2012	21.408	Nov 2013	-		21.408	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/IRBM - 1	C/CPAF	Lockheed Martin Space Systems Company:Courland, AL	0.000	11.916		0.000		4.000	Nov 2013	-		4.000	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/IRBM - 2	C/CPAF	Orbital Sciences Corporation:Chandler, AZ	0.000	94.105		71.679	Nov 2012	72.987	Nov 2013	-		72.987	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/IRBM - 3	C/CPIF	Lockheed Martin Space Systems Company:Courland, AL	0.000	2.262		0.000		0.000		-		0.000	2.262	4.524	2.262
Target Hardware - Target Hardware/IRBM - 4	C/FFP	Orbital Sciences Corporation:Chandler, AZ	0.000	0.916		2.250	Nov 2012	0.000		-		0.000	0.000	3.166	0.000
Target Hardware - Target Hardware/IRBM - 5	C/FFP	Teledyne Solutions, Inc.:Huntsville, AL	0.000	0.896		0.837	Nov 2012	0.000		-		0.000	0.000	1.733	0.000
Target Hardware - Target Hardware/MRBM - 1	C/CPAF	Lockheed Martin Space Systems Company:Courland, AL	0.000	65.831		97.043	Nov 2012	97.655	Nov 2013	-		97.655	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/MRBM - 2	C/CPAF	Orbital Sciences Corporation:Chandler, AZ	0.000	62.142		11.544	Nov 2012	30.609	Nov 2013	-		30.609	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/MRBM - 3	C/CPIF	L3 Communications/ Coleman Aerospace:Orlando, FL	0.000	28.782		0.000		0.751	Nov 2013	-		0.751	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/MRBM - 4	C/CPIF	Orbital Sciences Corporation:Chandler, AZ	0.000	1.968		0.000		0.000		-		0.000	1.968	3.936	1.968

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Target Hardware - Target Hardware/MRBM - 5	C/FFP	Teledyne Solutions, Inc.:Huntsville, AL	0.000	0.560		0.000		0.000		-		0.000	0.560	1.120	0.560
Target Hardware - Target Hardware/MRBM - 6	C/FFP/LOE	MRBM T3 RFP:TBD	0.000	0.000		0.641	Mar 2013	0.000		-		0.000	0.000	0.641	0.000
Target Hardware - Target Hardware/MRBM-7	C/CPAF	MRBM T1/T2 RFP:TBD	0.000	0.000		0.000		28.816	Nov 2013	-		28.816	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/Multi-Class Components - 1	C/CPAF	Lockheed Martin Space Systems Company:Courtlund, AL	0.000	51.697		61.073	Nov 2012	54.947	Nov 2013	-		54.947	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/Multi-Class Components - 2	C/CPAF	Lockheed Martin Space Systems Company:United Kingdom	0.000	2.780		3.367	Nov 2012	3.228	Nov 2013	-		3.228	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/Multi-Class Components - 3	C/CPIF	Lockheed Martin Space Systems Company:Courtlund, AL	0.000	2.786		0.000		0.000		-		0.000	2.786	5.572	2.786
Target Hardware - Target Hardware/Multi-Class Components - 4	C/CPAF	Orbital Sciences Corporation:Chandler, AZ	0.000	0.000		7.603	Nov 2012	0.000		-		0.000	0.000	7.603	0.000
Target Hardware - Target Hardware/Multi-Class Components - 5	FFRDC	Massachusetts Institute of Technology, Lincoln Lab:Lexington, MA	0.000	0.653		0.000		1.013	Nov 2013	-		1.013	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/Multi-Class Components - 6	FFRDC	Sandia National Laboratories:Albuquerque, NM	0.000	2.559		0.000		2.237	Nov 2013	-		2.237	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/Multi-Class Components-7	C/CPAF	Multi-Class Components RFP:TBD	0.000	0.000		0.000		6.146	Nov 2013	-		6.146	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/SRBM - 1	C/CPAF	Lockheed Martin Space Systems	0.000	12.631		0.000		18.151	Nov 2013	-		18.151	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
		Company: Courtland, AL													
Target Hardware - Target Hardware/SRBM - 2	C/CPAF	Orbital Sciences Corporation: Chandler, AZ	0.000	4.192		2.320	Nov 2012	0.000		-		0.000	0.000	6.512	0.000
Target Hardware - Target Hardware/SRBM - 3	C/CPIF	L3 Communications/ Coleman Aerospace: Orlando, FL	0.000	0.000		1.620	Nov 2012	0.767	Nov 2013	-		0.767	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/SRBM - 4	C/CPIF	Lockheed Martin Space Systems Company: Courtland, AL	0.000	3.282		0.730	Nov 2012	3.294	Nov 2013	-		3.294	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/SRBM - 5	C/CPIF	Orbital Sciences Corporation: Chandler, AZ	0.000	5.803		0.000		0.000		-		0.000	5.803	11.606	5.803
Target Hardware - Target Hardware/SRBM - 6	C/FFP	Orbital Sciences Corporation: Chandler, AZ	0.000	1.310		0.000		0.000		-		0.000	1.310	2.620	1.310
Target Hardware - Target Hardware/SRBM - 7	MIPR	Naval Surface Warfare Center, Port Hueneme: Port Hueneme, CA	0.000	9.016		7.861	Nov 2012	19.013	Nov 2013	-		19.013	Continuing	Continuing	Continuing
Target Hardware - Target Hardware/SRBM - 8	MIPR	Missile Defense Agency: Huntsville, AL	0.000	3.990		0.000		0.000		-		0.000	3.990	7.980	3.990
Target Hardware - Target Hardware/SRBM - 9	FFRDC	Sandia National Laboratories: Albuquerque, NM	0.000	0.189		3.070	Nov 2012	2.035	Nov 2013	-		2.035	Continuing	Continuing	Continuing
Program Operations - Program Operations - 1	C/CPAF	Targets MiDAESS Support: Huntsville, AL	0.000	34.734		35.325	Nov 2012	37.008	Nov 2013	-		37.008	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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 Operations - Program Operations - 10	MIPR	Missile Defense Agency:Huntsville, AL	0.000	20.264		20.593	Nov 2012	21.433	Nov 2013	-		21.433	Continuing	Continuing	Continuing
Program Operations - Program Operations - 11	MIPR	Defense Finance and Accounting Services:Indianapolis, IN	0.000	0.000		0.000		0.225	Nov 2013	-		0.225	Continuing	Continuing	Continuing
Program Operations - Program Operations - 2	C/FFP	CACI:Huntsville, AL	0.000	0.169		0.172	Nov 2012	0.174	Nov 2013	-		0.174	Continuing	Continuing	Continuing
Program Operations - Program Operations - 3	C/FFP	Colsa Corporations:Huntsville, AL	0.000	1.052		0.000		0.000		-		0.000	1.052	2.104	1.052
Program Operations - Program Operations - 4	C/FFP	Tecolote Research, Inc.:Huntsville, AL	0.000	0.086		0.087	Jan 2013	0.087	Nov 2013	-		0.087	Continuing	Continuing	Continuing
Program Operations - Program Operations - 5	C/FFP	Phacil:Huntsville, AL	0.000	0.000		0.253	Nov 2012	0.255	Nov 2013	-		0.255	Continuing	Continuing	Continuing
Program Operations - Program Operations - 6	FFRDC	Johns Hopkins University, Applied Physics Lab:Baltimore, MD	0.000	0.316		0.353	Nov 2012	0.350	Nov 2013	-		0.350	Continuing	Continuing	Continuing
Program Operations - Program Operations - 7	MIPR	US Army Aviation & Missile Command:Huntsville, AL	0.000	1.022		1.212	Nov 2012	1.094	Nov 2013	-		1.094	Continuing	Continuing	Continuing
Program Operations - Program Operations - 8	MIPR	Aviation & Missile Research, Dev & Eng Center:Huntsville, AL	0.000	0.674		0.746	Nov 2012	0.874	Nov 2013	-		0.874	Continuing	Continuing	Continuing
Program Operations - Program Operations - 9	MIPR	US Air Force Space & Missile Systems Center (SMC):Albuquerque, NM	0.000	0.702		1.099	Nov 2012	1.344	Nov 2013	-		1.344	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Target Support - Target Support/Logistics - 1	C/CPAF	Lockheed Martin Space Systems Company: Courtland, AL	0.000	5.138		4.977	Nov 2012	3.747	Nov 2013	-		3.747	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 10	MIPR	National Security Agency: Albuquerque, NM	0.000	0.000		0.848	Nov 2012	0.000		-		0.000	0.000	0.848	0.000
Target Support - Target Support/Logistics - 11	MIPR	Naval Surface Warfare Center :Crane, IN	0.000	0.067		4.674	Nov 2012	0.802	Nov 2013	-		0.802	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 12	MIPR	Redstone Arsenal Garrison: Huntsville, AL	0.000	1.424		1.725	Nov 2012	0.000		-		0.000	0.000	3.149	0.000
Target Support - Target Support/Logistics - 13	MIPR	Redstone Technical Test Center: Huntsville, AL	0.000	0.502		0.000		0.000		-		0.000	0.502	1.004	0.502
Target Support - Target Support/Logistics - 14	MIPR	US Army Joint Munitions Command: Hawthorne Army Depot, NV	0.000	0.047		0.057	Nov 2012	0.054	Nov 2013	-		0.054	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 15	MIPR	US Naval Weapons Station: Earl, NJ	0.000	0.035		0.042	Nov 2012	0.039	Nov 2013	-		0.039	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 16	MIPR	US Property & Fiscal Office for Arizona: Phoenix, AZ	0.000	0.929		2.258	Nov 2012	0.705	Nov 2013	-		0.705	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 17	MIPR	US Army White Sands Missile Range: White Sands, NM	0.000	0.132		0.000		0.000		-		0.000	0.132	0.264	0.132
Target Support - Target Support/Logistics - 18	MIPR	Defense Finance & Accounting Service: Indianapolis, IN	0.000	0.284		0.633	Nov 2012	0.165	Nov 2013	-		0.165	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Target Support - Target Support/Logistics - 19	C/FFP	Northrop Grumman Space Systems:Albuquerque, NM	0.000	0.620		0.751	Nov 2012	0.000		-		0.000	0.000	1.371	0.000
Target Support - Target Support/Logistics - 2	C/CPFF	Alliant Techsystems, Inc. (ATK):Magna, UT	0.000	0.790		1.277	Nov 2012	0.800	Nov 2013	-		0.800	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 3	C/FFP	Aerojet Corporation:Albuquerque, NM	0.000	0.342		0.536	Nov 2012	0.360	Nov 2013	-		0.360	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 4	C/FFP	Alliant Techsystems, Inc. (ATK):Magna, UT	0.000	1.350		3.045	Nov 2012	1.200	Nov 2013	-		1.200	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 5	MIPR	Aviation & Missile Research, Dev & Eng Center:Huntsville, AL	0.000	0.113		0.109	Nov 2012	0.110	Nov 2013	-		0.110	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 6	MIPR	Hill Air Force Base:Ogden, UT	0.000	0.836		1.497	Nov 2012	0.832	Nov 2013	-		0.832	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 7	MIPR	Missile Defense Agency:Huntsville, AL	0.000	0.000		6.726	Nov 2012	0.812	Nov 2013	-		0.812	Continuing	Continuing	Continuing
Target Support - Target Support/Logistics - 8	MIPR	Naval Air Warfare Center, China Lake:China Lake, CA	0.000	1.400		1.695	Nov 2012	0.000		-		0.000	0.000	3.095	0.000
Target Support - Target Support/Logistics - 9	MIPR	New Mexico State University Physical Sciences Lab:Las Cruces, NM	0.000	0.162		0.000		0.000		-		0.000	0.162	0.324	0.162
Target Support - Target Support/Systems Engineering - 1	C/CPAF	Lockheed Martin Space Systems Company:Courland, AL	0.000	26.163		23.650	Nov 2012	18.210	Nov 2013	-		18.210	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Target Support - Target Support/Systems Engineering - 10	FFRDC	Sandia National Laboratories:Albuquerque, NM	0.000	0.227		0.000		0.000		-		0.000	0.227	0.454	0.227
Target Support - Target Support/Systems Engineering - 12	MIPR	Defense Finance & Accounting Service:Indianapolis, IN	0.000	0.382		0.463	Nov 2012	0.363	Nov 2013	-		0.363	Continuing	Continuing	Continuing
Target Support - Target Support/Systems Engineering - 13	C/CPAF	Orbital Sciences Corporation:Chandler, AZ	0.000	0.000		0.000		1.028	Nov 2013	-		1.028	Continuing	Continuing	Continuing
Target Support - Target Support/Systems Engineering - 2	FFRDC	Aerospace Corporation:El Segundo, CA	0.000	4.535		4.134	Nov 2012	2.861	Nov 2013	-		2.861	Continuing	Continuing	Continuing
Target Support - Target Support/Systems Engineering - 3	C/FFP	Northrop Grumman Space Systems:Albuquerque, NM	0.000	4.651		3.082	Nov 2012	1.041	Nov 2013	-		1.041	Continuing	Continuing	Continuing
Target Support - Target Support/Systems Engineering - 4	C/FFP	Teledyne Solutions, Inc.:Huntsville, AL	0.000	0.016		0.042	Nov 2012	0.000		-		0.000	0.000	0.058	0.000
Target Support - Target Support/Systems Engineering - 5	C/FFP	Wyle Laboratories:Huntsville, AL	0.000	0.941		0.399	Nov 2012	0.000		-		0.000	0.000	1.340	0.000
Target Support - Target Support/Systems Engineering - 6	FFRDC	Johns Hopkins University, Applied Physics Lab:Baltimore, MD	0.000	0.522		1.090	Nov 2012	0.845	Nov 2013	-		0.845	Continuing	Continuing	Continuing
Target Support - Target Support/Systems Engineering - 7	MIPR	US Air Force Space & Missile Systems Center (SMC):Albuquerque, NM	0.000	0.904		1.385	Nov 2012	0.803	Nov 2013	-		0.803	Continuing	Continuing	Continuing
Target Support - Target Support/Systems Engineering - 8	MIPR	Aviation & Missile Research,	0.000	8.484		8.405	Nov 2012	4.035	Nov 2013	-		4.035	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
		Dev & Eng Center:Huntsville, AL													
Target Support - Target Support/Systems Engineering - 9	C/CPAF	L3 Communications/ Coleman Aerospace:Orlando, FL	0.000	0.922		0.000		0.000		-		0.000	0.922	1.844	0.922
Subtotal			0.000	497.550		414.696		468.713		0.000		468.713			

Remarks
N/A

Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks
N/A

Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks
N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks
N/A

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract					
Project Cost Totals	0.000	497.550		414.696		468.713		0.000		468.713				

Remarks
N/A

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMD5 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 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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-A (SRBM) Pre-Ship Readiness Review (Ship Set 8)		▲																										
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 14)		▲																										
IRBM Type 1/Type 2 Preliminary Design Review		▲																										
eMRBM Critical Design Review		▲																										
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 9)		▲																										
MRT (SRBM) Pre-Ship Readiness Review (Ship Set 10)			▲																									
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 1)			▲																									
IRBM Type 1/Type 2 Critical Design Review				▲																								
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 10)				▲																								
E-LRALT (MRBM) Pre-Ship Readiness Review (Ship Set 1)				▲																								
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 4)					▲																							
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 13)						△																						
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 12)						△																						
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 11)						△																						
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 12)						△																						
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 11)						△																						
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 10)						△																						
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 18)						△																						
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 13)						△																						
LV-2 Pre-Ship Readiness Review (Ship Set 4)						△																						

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT 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 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 10)						△																						
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 16)						△																						
eMRBM Pre-Ship Readiness Review (Ship Set 2)						△																						
eMRBM Pre-Ship Readiness Review (Ship Set 1)						△																						
MRBM Type 3 Critical Design Review						△																						
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 1)									△																			
LV-2 Pre-Ship Readiness Review (Ship Set 6)									△																			
LV-2 Pre-Ship Readiness Review (Ship Set 5)									△																			
eMRBM Pre-Ship Readiness Review (Ship Set 3)									△																			
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 1)												△																
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 2)												△																
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 2)												△																
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 3)													△															
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 14)													△															
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 3)													△															
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 5)													△															
SRBM Type 3 Pre-Ship Readiness Review (Ship Set 1)														△														
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 12)														△														
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)														△														
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 4)														△														
eMRBM Pre-Ship Readiness Review (Ship Set 4)														△														

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT 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 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 1)														△														
ICBM Booster #1 Pre-Ship Readiness Review														△														
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 2)														△														
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 17)															△													
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 3)															△													
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 4)																△												
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 5)																	△											
eMRBM Pre-Ship Readiness Review (Ship Set 5)																		△										
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 6)																			△									
ICBM Booster #2 Pre-Ship Readiness Review																				△								
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 5)																					△							
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 6)																						△						
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 7)																							△					
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 8)																								△				
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 6)																									△			
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 9)																										△		
ICBM Booster #3 Pre-Ship Readiness Review																											△	
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 7)																											△	
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 5)																											△	
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 5)																											△	

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT 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 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 6)																								△				
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 8)																												△
ICBM Booster #5 Pre-Ship Readiness Review																												△
ICBM Booster #4 Pre-Ship Readiness Review																												△
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 6)																												△
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 7)																												△

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDS Targets Program</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 8)	2	2012	2	2012
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 14)	2	2012	2	2012
IRBM Type 1/Type 2 Preliminary Design Review	2	2012	2	2012
eMRBM Critical Design Review	2	2012	2	2012
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 9)	2	2012	2	2012
MRT (SRBM) Pre-Ship Readiness Review (Ship Set 10)	3	2012	3	2012
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 1)	3	2012	3	2012
IRBM Type 1/Type 2 Critical Design Review	4	2012	4	2012
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 10)	4	2012	4	2012
E-LRALT (MRBM) Pre-Ship Readiness Review (Ship Set 1)	4	2012	4	2012
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 4)	1	2013	1	2013
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 13)	2	2013	2	2013
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 12)	2	2013	2	2013
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 11)	2	2013	2	2013
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 12)	2	2013	2	2013
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 11)	2	2013	2	2013
ARAV-A (SRBM) Pre-Ship Readiness Review (Ship Set 10)	2	2013	2	2013
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 18)	2	2013	2	2013
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 13)	2	2013	2	2013
LV-2 Pre-Ship Readiness Review (Ship Set 4)	2	2013	2	2013
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 10)	2	2013	2	2013
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 16)	2	2013	2	2013

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDs Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Events	Start		End	
	Quarter	Year	Quarter	Year
eMRBM Pre-Ship Readiness Review (Ship Set 2)	2	2013	2	2013
eMRBM Pre-Ship Readiness Review (Ship Set 1)	2	2013	2	2013
MRBM Type 3 Critical Design Review	2	2013	2	2013
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 1)	1	2014	1	2014
LV-2 Pre-Ship Readiness Review (Ship Set 6)	1	2014	1	2014
LV-2 Pre-Ship Readiness Review (Ship Set 5)	1	2014	1	2014
eMRBM Pre-Ship Readiness Review (Ship Set 3)	1	2014	1	2014
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 1)	3	2014	3	2014
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 2)	3	2014	3	2014
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 2)	3	2014	3	2014
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 3)	4	2014	4	2014
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 14)	4	2014	4	2014
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 3)	4	2014	4	2014
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 5)	4	2014	4	2014
SRBM Type 3 Pre-Ship Readiness Review (Ship Set 1)	2	2015	2	2015
FMA-1 (SRBM) Pre-Ship Readiness Review (Ship Set 12)	2	2015	2	2015
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 4)	2	2015	2	2015
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 4)	2	2015	2	2015
eMRBM Pre-Ship Readiness Review (Ship Set 4)	2	2015	2	2015
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 1)	2	2015	2	2015
ICBM Booster #1 Pre-Ship Readiness Review	3	2015	3	2015
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 2)	3	2015	3	2015
ARAV-B (SRBM) Pre-Ship Readiness Review (Ship Set 17)	4	2015	4	2015
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 3)	4	2015	4	2015
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 4)	1	2016	1	2016

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MT05: <i>BMDs Targets Program</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Events	Start		End	
	Quarter	Year	Quarter	Year
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 5)	2	2016	2	2016
eMRBM Pre-Ship Readiness Review (Ship Set 5)	2	2016	2	2016
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 6)	3	2016	3	2016
ICBM Booster #2 Pre-Ship Readiness Review	3	2016	3	2016
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 5)	4	2016	4	2016
ARAV-C (SRBM) Pre-Ship Readiness Review (Ship Set 6)	4	2016	4	2016
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 7)	4	2016	4	2016
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 8)	1	2017	1	2017
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 6)	2	2017	2	2017
MRBM T1/T2 Pre-Ship Readiness Review (Ship Set 9)	2	2017	2	2017
ICBM Booster #3 Pre-Ship Readiness Review	3	2017	3	2017
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 7)	4	2017	4	2017
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 5)	4	2017	4	2017
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 5)	4	2017	4	2017
MRBM Type 3 Pre-Ship Readiness Review (Ship Set 6)	4	2017	4	2017
FMA-2 (SRBM) Pre-Ship Readiness Review (Ship Set 8)	3	2018	3	2018
ICBM Booster #5 Pre-Ship Readiness Review	3	2018	3	2018
ICBM Booster #4 Pre-Ship Readiness Review	3	2018	3	2018
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 6)	3	2018	3	2018
IRBM Type 1/Type 2 Pre-Ship Readiness Review (Ship Set 7)	4	2018	4	2018

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MD40: <i>Program Wide Support</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MD40: <i>Program Wide Support</i>	-	0.000	21.051	26.544	-	26.544	25.662	20.879	26.680	25.794	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

Beginning in FY 2013, funding was transferred from BMD Enabling Program Element 0603890C Budget Project MD40.

A. Mission Description and Budget Item Justification

Program-Wide Support (PWS) contains non-headquarters management costs in support of Missile Defense Agency (MDA) functions and activities across the entire Ballistic Missile Defense System (BMDS). It Includes Government Civilians, Contract Support Service, and Federally Funded Research and Development Center (FFRDC) providing integrity and oversight of the BMDS as well as, supporting MDA in enabling the development and evaluation of technologies that will respond to the changing threat. In addition, includes Global Deployment personnel and support performing deployment site preparation and activation. Other costs included provide facility capabilities for MDA Executing Agent locations, such as physical and technical security, legal services, travel and agency training, office and equipment leases, utilities, data and unified communications support, supplies and maintenance, materiel and readiness and central property management of equipment, and similar operating expenses. Also includes legal settlements. In keeping with congressional intent, Program Wide Support is allocated on a pro-rata basis and therefore, fluctuates by year based on the total MDA budget.

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

	FY 2012	FY 2013	FY 2014
Title: Program Wide Support	0.000	21.051	26.544
Articles:	0	0	0
Description: N/A			
FY 2012 Accomplishments: N/A			
FY 2013 Plans: See paragraph A: Mission Description and Budget Item Justification			
FY 2014 Plans: See paragraph A: Mission Description and Budget Item Justification			
Accomplishments/Planned Programs Subtotals	0.000	21.051	26.544

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT 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 2014 Missile Defense Agency **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603915C: <i>Ballistic Missile Defense Targets</i>	PROJECT MD40: <i>Program Wide Support</i>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-----------------------------------------------------

Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Wide Support - Agency Infrastructure Support (MIPR)	MIPR	Various; Multi:AL, VA	0.000	0.000		11.340	Mar 2013	11.340	Mar 2014	-		11.340	Continuing	Continuing	Continuing
Program Wide Support - Agency Infrastructure Support (FFP)	C/FFP	Northrup Gruman; Multi:AL, VA	0.000	0.000		9.460	Jul 2013	9.460	Jul 2014	-		9.460	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations Management	Allot	Various; Multi:AL, CA, CO, VA	0.000	0.000		0.251	Jun 2013	5.744	Jun 2014	-		5.744	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		21.051		26.544		0.000		26.544			

Remarks
N/A

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	21.051	26.544	0.000	26.544			

Remarks
N/A