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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>
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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	433.468	381.041	316.929	268.990	-	268.990	309.901	227.476	262.488	254.913	Continuing	Continuing
MD07: <i>THAAD</i>	398.748	371.516	229.869	228.692	-	228.692	174.235	181.607	180.303	162.331	Continuing	Continuing
MC07: <i>Cyber Operations</i>	-	0.000	0.000	0.530	-	0.530	0.539	0.548	0.557	0.574	Continuing	Continuing
MT07: <i>THAAD Test</i>	-	0.000	70.928	24.547	-	24.547	118.946	32.415	65.559	76.563	Continuing	Continuing
MD06: <i>Patriot Advanced Capability-3 (PAC-3)</i>	34.720	1.156	1.145	1.091	-	1.091	1.108	1.219	1.240	1.257	Continuing	Continuing
MD40: <i>Program-Wide Support</i>	-	8.369	14.987	14.130	-	14.130	15.073	11.687	14.829	14.188	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

The FY 2014 funding realigned to Operation and Maintenance for Ballistic Missile Defense System Terminal Defense.

Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.

A. Mission Description and Budget Item Justification

The Terminal Defense Program Element includes the Terminal High Altitude Area Defense (THAAD) development program, Cyber Operations, THAAD System Test, support of PATRIOT (Phased Array Tracking Radar Intercept Of Target) Advanced Capability-3 (PAC-3) participation in Missile Defense Agency (MDA) activities, and Program Wide Support (PWS).

THAAD provides the only air transportable, fast reaction capability for the warfighter to provide area coverage against Short and Medium Range Ballistic Missiles within four hours of arrival. The THAAD element includes five major components: Interceptors, Launchers, Army Navy/Transportable Radar Surveillance - Type 2 (AN/TPY-2) Radars, THAAD Fire Control and Communication (TFCC), and THAAD Peculiar Support Equipment. THAAD delivered Battery #1 in FY 2009 and Battery #2 in FY 2010 to the U.S. Army at Fort Bliss, Texas for initial fielding and training. THAAD has completed the development of the THAAD 1.0 configuration and is developing the THAAD Build 2.0 capability. Continued development and integration will provide for enhanced debris mitigation, improved interoperability with other Ballistic Missile Defense System (BMDS) elements, and development of training devices to support the THAAD Institutional Training Base.

Cyber Operations sustains Missile Defense Agency (MDA) DoD Information Assurance Certification and Accreditation Program (DIACAP) and Controls Validation Testing (CVT) activities, analysis of validation results, risk assessments and reviews of proposed Program Manager/Information Assurance Manager (PM/IAM) Plans

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of Action and Milestones (POA&Ms) for MDA Command and Control Battle Management and Communications (C2BMC) mission systems and supports THAAD certification to operate in the BMD System.

THAAD System Test conducts Ballistic Missile Defense System (BMDS) Flight Tests and Ground Tests with other BMDS elements (including BMDS Command Control / Battle Management and Communication, PATRIOT and Aegis) in accordance with BMDS Integrated Master Test Plan. THAAD System Test coordinates with Operational Test Agencies, conducts flight test operations, performs post-flight test reporting, and performs data distribution and data storage at Pacific Missile Range Facility and the Reagan Test Site.

PATRIOT Advanced Capability (PAC-3) is a U.S. Army short range BMDS that interfaces with the BMDS. MDA funds PATRIOT participation in BMDS interoperability integration efforts.

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).

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	290.076	316.929	313.212	-	313.212
Current President's Budget	381.041	316.929	268.990	-	268.990
Total Adjustments	90.965	0.000	-44.222	-	-44.222
• 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	101.784	0.000			
• SBIR/STTR Transfer	-10.819	0.000			
• Other Adjustment	0.000	0.000	-44.222	-	-44.222

Change Summary Explanation

The FY 2014 funding realigned to Operations and Maintenance for Ballistic Missile Defense System Terminal Defense.

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>
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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
MD07: <i>THAAD</i>	398.748	371.516	229.869	228.692	-	228.692	174.235	181.607	180.303	162.331	Continuing	Continuing
Quantity of RDT&E Articles	12	38	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

Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.

A. Mission Description and Budget Item Justification

Terminal High Altitude Area Defense (THAAD) Development activities (1.0) focused on the design, development, testing and verification of a significant, fundamental capability to engage threats both inside and outside of the atmosphere in their terminal phase of flight. This capability includes engagements against short to medium-range ballistic missiles and asymmetric threats. Development of THAAD's next incremental capability (2.0) will enhance and extend the current 1.0 capability and be delivered as part of THAAD's acquisition/development strategy.

THAAD 1.0 (Baseline Capability Development) provided the fundamental capability against short and medium-range Ballistic Missiles and asymmetric threats inside and outside the atmosphere by FY 2012. This development completed with: 1) Ground and Flight Test of the weapon system against complex Re-entry Vehicles (RV), background clutter, and Medium-Range Ballistic Missile (MRBM) threats; 2) Ground and Flight Test of the initial Discrimination Capability; 3) Enhanced communication capability to support Link 16 compatibility with the Ballistic Missile Defense System (BMDS) and engagement coordination with other BMDS elements; and 4) Conditional Materiel Release.

THAAD 2.0 (Advanced Capability Development) expands the capability of THAAD 1.0 system. New THAAD capabilities include: 1) Launch on Link 16 BMD System Based Track providing the ability to initiate an engagement and launch THAAD interceptors using sensor data provided by BMDS sources outside the THAAD Battery; 2) Improving THAAD Weapons System performance in the presence of a high debris environment; 3) Expanding the defended area footprints by remote operation of THAAD Launchers; 4) Peer-to-peer engagement coordination with Aegis and PATRIOT weapon systems; 5) Software upgrades to maintain capability against evolving threats; 6) Message based regional engagement command functionality to process message content from Command and Control/Battle Management and Communications (C2BMC) to obtain direction for target engagement; 7) Weapon System Information Assurance mandatory updates; 8) Warfighter requested enhancements; and 9) Upgrades to maintain interface with other BMDS software builds.

In addition to THAAD Development, there are three planned tasks: THAAD Program Support, Program Operations, and Project Redwood.

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THAAD Program Support (previously Maintenance, Training, and Transportation) provides institutional and unit training devices to support U.S. Army requirements based on the System Training Plan (STRAP) and provides maintenance and transportation to support THAAD development.

Program Operations (previously Program Management) provides strategic planning, program integration, cost estimating, contracting, financial management, internal reviews and audits, earned-value management and program assessments for the THAAD Program Office.

Project Redwood- Details at a Higher Classification is reported in accordance with Title 10, United States Code, Section 119 (a)(1) in the Special Access Program Annual Report to Congress.

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

	FY 2012	FY 2013	FY 2014
<p>Title: THAAD Development (previously Weapon Sys Engr Integ & Test)</p> <p align="right">Articles:</p> <p>Description: This task includes completion of THAAD 1.0 development and initiates development of THAAD 2.0. Flight and ground testing of this development is included in separate task (project); however, pre and post mission engineering analysis supporting testing is included in this task. In addition, it includes \$50.109 Million of Program Operations which has moved to the Program Operations (previously Program Management) accomplishment starting in FY 2014.</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> -Delivered 38 Interceptors for Batteries #1 and #2 that were purchased with FY 2007 through FY 2012 funds -Completed integration of Extremely High Frequency (EHF) and Super High Frequency (SHF) communications capabilities into the THAAD weapon system -Continued in the design, development, qualification testing, release, field, and support incremental release of System Software Support (SSS) builds for each THAAD component -Continued the development of automated test tools for SSS activities -Provided real-time closed loop system and component testing utilizing THAAD hardware-in-the-loop (HWIL) facilities -Conducted pre-mission analysis of THAAD performance in FTI-01 and FTO-01, operational scenarios testing THAAD's ability to conduct coordinated engagements with Aegis and PATRIOT operating with C2BMC and forward-based AN/TPY-2. Analysis ensured mission range and public safety and generated system performance predictions for post mission comparisons -Conducted analysis of Critical Engagement Conditions (CEC) and Empirical Measurement Events (EME) data collected during flight testing -Determined the impacts to Joint data link standard MIL-STD-3011 by assessing interoperability capabilities of THAAD system, concept of operations, and developed Software (SW) -Continued development of Netted Embedded Training to enable THAAD Battery participation in common training scenarios, near real time with other THAAD Batteries, lower tier units, other elements of the Ballistic Missile Defense System (BMDS) (through Distributed Multi-Echelon Training Systems) 	<p>198.569</p> <p>38</p>	<p>171.433</p> <p>0</p>	<p>142.146</p> <p>0</p>

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012		
<ul style="list-style-type: none"> -Continued to develop, maintain, and integrate THAAD Integrated Simulation and Tactical Software (ISTS) into BMDS digital framework and conducted Verification, Validation and Accreditation (VV&A) for Simulation-Over-Live-Driver (SOLD), ISTS at the THAAD Evaluation Center (TEC) HWIL facility -Continued Models and Simulations (M&S) development to support Element and BMDS events including all Integrated Master Test Plan (IMTP) M&S related activities to include System Pre Mission Tests (SPMTs) and System Post Flight Reconstruction (SPFRs) -Updated THAAD interface specifications and interface control documents for required BMDS changes -Conducted threat assessments of the BMDS Adversary Development Package (ADP) -Continued THAAD interoperability planning with joint and coalition planning systems -Continued Ignition System Safety Review Board (ISSRB) testing of optical block re-design -Implemented Mandatory Information Assurance Updates and performed Information Assurance Vulnerability Assessments (IAVA) on all THAAD component software -Initiated THAAD Build 2.0 phase I development of non-organic intercept debris mitigation -Initiated the design and development to rehost, test, and qualify new Launcher Operating System to minimize Information Assurance vulnerabilities -Completed verification of Thermally Initiated Venting System <p>Variance Analysis: Increase from PB 2013 to PB 2014 includes the engineering redesign, integration, and ISSRB testing for the interceptor optical block, modifications to the instrumentation for flight test interceptors, test sets for interceptor stockpile reliability testing , and initiate Debris Mitigation capability.</p> <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> -Continue THAAD Build 2.0 development of non-organic intercept debris mitigation -Conduct post-mission analysis of THAAD performance in FTI-01, an operational scenario testing THAAD`s ability to conduct coordinated engagements with Aegis and PATRIOT operating with C2BMC and forward-based AN/TPY-2 -Continue pre-mission analysis for FTO-01, an operational scenario further testing THAAD`s ability to conduct coordinated engagements with Aegis and PATRIOT operating with C2BMC and forward-based AN/TPY-2. Analysis ensures mission range and public safety and generates system performance predictions for post mission comparison. -Continue integration and implementation of THAAD and its components in the BMDS through participation in MDA Ground Test Campaign and Performance Assessments to evaluate system performance and interoperability within the integrated BMDS -Continue integration and implementation of THAAD and its components in the BMDS through participation in Combatant Commander (COCOM) wargames and exercises -Design, develop, qualification test, release, and field annual release of Post Deployment Software Support (PDSS) to ensure continued performance and operation of fielded Batteries 						

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
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<ul style="list-style-type: none"> -Implement Mandatory Information Assurance Updates and perform Information Assurance Vulnerability Assessments (IAVA) to mitigate potential system vulnerabilities and to ensure continued performance and operation of fielded Batteries -Develop software updates for Simulation-Over-Live Driver (SOLD) to enable testing and training of mass raid scenarios on tactical hardware and integrate into Ballistic Missile Defense System (BMDS) flight test and ground test campaign -Provide technical and business management support activities, financial management, cost and schedule performance analysis, cost estimation and analysis, and integration activities to ensure effective use of appropriated resources -Provide contractor program management, and subcontract management to ensure effective use of appropriated resources -Execute Terminal High Altitude Area Defense program in compliance with internal and external direction, policies, and regulations to ensure effective use of appropriated resources -Provide technical and business support in the negotiation and award of the Battery contracts -Conduct Integrated Baseline Reviews to ensure prime contractor's baseline cost, schedule, and risk aligned with THAAD project office requirements 			
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Variance Analysis: Increase from FY 2011 to FY 2012 caused by movement of scope from System Engineering, THAAD Fire Control and Communication, Launcher, and Interceptor to this budget activity. Increase from FY 2012 to FY 2013 includes scope to initiate THAAD Build 2.0 software and hardware and incorporation of the Integrated Master Test Plan.

FY 2014 Plans:

- Continue development of Phase II debris mitigation functionality and integrate into the weapon system to improve interoperability with other BMDS elements
- Conduct Terminal High Altitude Area Defense (THAAD) 2.0 Engineering Design Review to ensure Phase II debris mitigation design accounts for the results of FTO-01 (BMDS Operational Flight Test)
- Conduct Models and Simulations (M&S) development to support element and Ballistic Missile Defense System (BMDS) events including all Integrated Master Test Plan (IMTP) M&S related activities to include System Pre Mission Tests (SPMTs) and System Post Flight Reconstruction (SPFRs) and conduct analysis of the Critical Engagement Conditions (CEC) and Empirical Measurement Events (EME) data collected during test events to validate and accredit the M&S by the Operational Test Agency (OTA)
- Initiate development of Launch on Link 16 BMD System Based Track capability to provide the ability to initiate launch and engagement of THAAD interceptors using sensor data provided by BMDS sources outside the THAAD Battery
- Continue to design, develop, qualification test, and field annual release of Terminal High Altitude Area Defense (THAAD) system software to ensure continued performance and operation of fielded batteries
- Continue to develop and maintain models, simulations, testbeds, and associated software required to perform engineering verification and analysis utilizing system simulations and Hardware-in-the-Loop (HWIL) facilities to ensure accurate element configuration and representation

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>-Continue integration and implementation of THAAD and its components in the BMDS through participation in Missile Defense Agency (MDA) Ground Test Campaigns and Performance Assessments to evaluate system performance and interoperability within the integrated BMDS</p> <p>-Continue integration and implementation of THAAD and its components in the BMDS through participation in Combatant Commander (COCOM) wargames and exercises</p> <p>-Implement Mandatory Information Assurance updates and perform Information Assurance Vulnerability Assessments (IAVA) to mitigate potential system vulnerabilities and to ensure continued performance and operation of fielded batteries</p> <p>-Update THAAD software and hardware to ensure compliance with DoD Weapon System Information Assurance Programs and guidance</p> <p>-Provide prime contractor technical and business management support activities, financial management, cost and schedule performance analysis, cost estimation and analysis, and integration activities to ensure effective use of appropriated resources</p> <p>-Provide prime contractor program management, and subcontract management to ensure effective use of appropriated resources</p> <p>Variance Analysis: Decreases are a result of realigning portions of Build 2.0 and transfer of \$50.109 Million to the Program Operations (previously Program Management) accomplishment.</p>				
<p>Title: System Test</p> <p align="right">Articles:</p> <p>Description: THAAD System Test included mission planning, pre-test integration, conduct of readiness reviews, test asset transportation, test execution and data collection, post test reporting, data distribution, sustainment and maintenance of test equipment and facilities, maintenance, repair, and fueling of THAAD Battery assets utilized in testing. System Test moves to project MT07 beginning in FY 2013.</p> <p>FY 2012 Accomplishments:</p> <p>-Supported Flight Test, Ground Test, Mission Planning, Performance Assessment, Systems Analysis, and Range Safety analysis in accordance with Integrated Master Test Plan</p> <p>-Continued flight test planning, range interface, coordination with Operational Test Agencies (OTAs) and support of flight test operations at Reagan Test Site (RTS) for FTI-01 (Ballistic Missile Defense System (BMDS) Integration Flight Test)</p> <p>-Continued flight test planning, range interface, coordination with Operational Test Agencies (OTAs) at Reagan Test Site (RTS) for FTO-01 (BMDS Operational Flight Test) to further demonstrate in an operational scenario THAAD's ability to conduct coordinated engagements with Aegis and PATRIOT operating with C2BMC and forward-based AN/TPY-2</p> <p>-Supported planning and execution of BMDS interoperability exercises and overlays</p> <p>-Provided pre-mission planning, pre and post mission analysis, reporting support, and execution to BMDS Ground Test campaigns</p>		58.151 0	0.000 0	0.000 0

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<ul style="list-style-type: none"> -Provided data management, facilities operations, and post-test analysis and reporting support in support of BMDS System Tests -Monitored targets design, development, delivery, and execution to support flight test program -Supported pre-flight testing in the System Integration Laboratory (SIL) Hardware-in-the-Loop (HWIL) facility -Conducted JITC and Army certification testing to support incremental release of System Software Support (SSS) builds for THAAD Fire Control & Communication (TFCC) -Collected and analyzed Critical Engagement Conditions (CEC) and Empirical Measurement Events (EME) data from flight testing -Provided onsite range support for THAAD component maintenance, repair and fueling <p>Variance Analysis: Decrease from PB 2013 to PB 2014 due to the elimination of FTT-13 and realigning FTO-01 to FY 2013.</p> <p>FY 2013 Plans: Plans for this scope are included in MT07 THAAD accomplishments/plans: System Test.</p> <p>FY 2014 Plans: Plans for this scope are included in MT07 THAAD accomplishments/plans: Flight Test, Infrastructure, and Ground Test.</p>				
Title: THAAD Program Support (previously Maintenance, Training, and Transportation)		36.704	51.040	32.315
		0	0	0
<p>Description: This activity provides maintenance and transportation for each THAAD component and to ensure that Government Furnished Equipment (GFE) is available when required. It develops and maintains the THAAD training devices and provides the contract vehicle necessary to conduct New Equipment Training prior to each THAAD Battery fielding. This activity develops the THAAD Objective Supportability Strategy, as well as, develops the Depot Maintenance Support Plan, Level of Repair Analysis, Core Logistics Assessment, Performance Based Logistics Planning, Core Depot Assessment/Source of Repair Analysis, Depot Maintenance Study, and the Demilitarization/Disposal Plan. This activity also includes the development of enhanced transportation capabilities for the missile round. The THAAD embedded Army Hybrid Cell is the staff and internal operating budget that performs and executes the scope of the Program Support Items activity; they are a separate staff from the Program Operations. It is composed of combined MDA and Army personnel providing Doctrine, Training, Leadership, Organization, Materiel, Soldier (DTLOMS) support for the THAAD system. The Hybrid Cell provides technical guidance, financial management, cost and schedule performance analysis, cost estimation and analysis, integration activities, and sub-contract management to ensure effective use of appropriated resources</p> <p>FY 2012 Accomplishments:</p> <ul style="list-style-type: none"> -Provided supportability planning & analysis, training oversight, peculiar support equipment, transportation controls, deployment and sustainment support -Completed Collective Training for Battery #2 				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012
<ul style="list-style-type: none"> -Continued planning for THAAD New Equipment Training (NET) and Collective Training for Batteries 3 through 6 -Continued planning for replacement training in support of fielded systems -Provided maintenance support on multiple hardware and software configurations of THAAD components -Continued maintenance, operations and transportation in support of THAAD development -Continued development of Institutional Conduct for Fire Trainer (ICOFT) -Continued in the design and development of Radar March Order & Emplacement Trainer (MOET) -Continued in the design and development of Table Top Trainer (TT3) -Continued support of Army requirement for additional training devices For Institutional Training Base (ITB) based on update to System Training Plan (STRAP) <p>Variance Analysis: Decrease from PB 2013 to PB 2014 is a result of realigning portions of Build 2.0.</p> <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> -The THAAD embedded Army Hybrid Cell is composed of combined MDA and Army personnel providing Doctrine, Training, Leadership, Organization, Materiel, Soldier (DTLOMS) support for the THAAD system. The Hybrid Cell provides technical guidance, financial management, cost and schedule performance analysis, cost estimation and analysis, integration activities, and sub-contract management to ensure effective use of appropriated resources -Continue Launcher and Radar Embedded Training (ET) development to provide a capability to maintain soldier proficiency in the classroom and in fielded Batteries -Continue development for Institutional Conduct of Fire Trainer (ICOFT) for Institutional Training Base to maintain Battery operational capability after soldier rotations -Continue development of Radar March Order & Emplacement Trainer (RMOET) for Institutional Training Base to maintain Battery operational capability after soldier rotations -Complete production of Table Top Trainer (TT3) -Initiate spares procurement for Institutional Training Base (ITB) to maintain training devices -Refurbish one Launcher and one Launcher MOET for Institutional Training Base (ITB) to maintain Battery operational capability after soldier rotations -Complete the development of a System Level Interactive Electronic Technical Manual (IETM) for Battery Training to maintain warfighter proficiency <p>Variance Analysis: Increase from FY 2011 to FY 2012 caused by creation of this budget activity to incorporate Integrated Logistic Support and Sustainment. Increase from FY 2012 to FY 2013 due to sustainment of a larger number of fielded assets.</p> <p>FY 2014 Plans:</p>				
				FY 2013
				FY 2014

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>-Complete development for Institutional Conduct of Fire Trainer (ICOFT) for Institutional Training Base to maintain Battery operational capability after soldier rotations</p> <p>-Complete development of Radar March Order & Emplacement Trainer (RMOET) for Institutional Training Base to maintain Battery operational capability after soldier rotations</p> <p>-Refurbish Launcher components for Institutional Training Base (ITB) to maintain Battery operational capability after soldier rotations</p> <p>-Develop Launcher and Radar Embedded Training (ET) to provide a capability to maintain soldier proficiency in the classroom and in fielded Batteries</p> <p>-Continue acquisition of spares for Institutional Training Base (ITB) to maintain training devices</p> <p>Variance Analysis: Decreases are a result of realigning funding to Operations and Maintenance, Defense Wide (0100D) for sustainment.</p>				
<p>Title: Program Operations (previously Program Management)</p> <p align="right">Articles:</p>		45.140 0	0.000 0	50.109 0
<p>Description: Program Operations provides for management of the Terminal High Altitude Area Defense (THAAD) 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 THAAD system and components.</p> <p>FY 2012 Accomplishments:</p> <p>-Provided technical and business management support activities, financial management, cost and schedule performance analysis, cost estimation and analysis, configuration management and integration activities, and integration activities to ensure effective use of appropriated resources</p> <p>-Ensured Terminal High Altitude Area Defense (THAAD) program compliance with internal and external direction, policies, and regulations to deliver critical capability within a consistent and disciplined process</p> <p>-Provided technical and business support in the negotiation and award of the Battery contracts</p> <p>-Conducted Integrated Baseline Reviews to ensure prime contractor's baseline cost, schedule, and risk aligned with THAAD Project Office requirements</p> <p>-Conducted internal Baseline Execution Reviews to measure program progress against the six Missile Defense Agency approved baselines</p> <p>-Continued a Mission Assurance and Manufacturing Engineering Program to include Quality, Configuration Management, Manufacturing, Engineering, and Safety in all phases of the system life cycle, throughout the supply chain, and at all levels of assembly emphasizing high yield rates which minimize test and rework costs</p>				

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
<p>-Provided Quality Safety and Mission Assurance (QSMA) operations to ensure compliance with Agency requirements for design, test, manufacturing, quality, safety and reliability to ensure high quality products are delivered to the Warfighter.</p> <p>Variance Analysis: Increase due to realignment from THAAD Procurement to this task.</p> <p>FY 2013 Plans: FY 2013 activities are included in MD07 THAAD accomplishments/plans: Weapon System Engineering Integration & Test.</p> <p>FY 2014 Plans: -Provide technical and business management support activities, financial management, cost and schedule performance analysis, cost estimation and analysis, configuration management and integration activities, to provide the Program Director with critical program status and decision quality data -Ensure Terminal High Altitude Area Defense (THAAD) program compliance with internal and external direction, policies, and regulations to deliver critical capability within a consistent and disciplined process -Conduct internal Baseline Execution Reviews to measure program progress against the six Missile Defense Agency approved baselines -Continue a Mission Assurance and Manufacturing Engineering Program to include Quality, Configuration Management, Manufacturing, Engineering, and Safety in all phases of the system life cycle, throughout the supply chain, and at all levels of assembly emphasizing high yield rates which minimize test and rework costs -Provide Quality Safety and Mission Assurance (QSMA) operations to ensure compliance with Agency requirements for design, test, manufacturing, quality, safety and reliability to ensure high quality products are delivered to the Warfighter</p> <p>Variance Analysis: Increase is due to realignment of this task from THAAD Development (previously Weapon Sys Engr Integ & Test) to this task.</p>				
<p>Title: Project Redwood- Details at a Higher Classification</p> <p>Description: See Description Below</p> <p>FY 2012 Accomplishments: This project is reported in accordance with Title 10, United States Code, Section 119 (a)(1) in the Special Access Program Annual Report to Congress.</p> <p>FY 2013 Plans:</p>		<p>21.839</p> <p>0</p>	<p>7.396</p> <p>0</p>	<p>4.122</p> <p>0</p>

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>		PROJECT MD07: <i>THAAD</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
This project is reported in accordance with Title 10, United States Code, Section 119 (a)(1) in the Special Access Program Annual Report to Congress. FY 2014 Plans: This project is reported in accordance with Title 10, United States Code, Section 119 (a)(1) in the Special Access Program Annual Report to Congress.				
Title: Modeling and Simulations		11.113	0.000	0.000
		Articles: 0	0	0
Description: THAAD supports Ballistic Missile Defense System (BMDS) Models and Simulations which provides end to end simulation to support flight test pre-mission and post mission analysis, system performance analysis, Ballistic Missile Defense Ground Test, and warfighter exercises. These efforts allow THAAD to participate in BMDS testing activities. Enhancements to models and simulations are included in THAAD Development beginning in FY 2013.				
FY 2012 Accomplishments: -Developed and delivered major releases of M&S digital products: Digital Simulation Architecture framework for use in Performance Assessment as part of the CD04 Operational Test, real-time venues including Warfighter Exercises, Warfighter Training, C2BMC software Spiral Testing for MDA's release of C2BMC v8.x development, and Ground Test campaign; Missile Defense Space Warning Tool (models validated space-borne assets of BMDS) for use in Performance Assessments and Warfighter Exercises, BMD International Simulation for use in International virtual BMD demonstrations, BMD education, and Warfighter wargames -Integrated, tested, functionally qualified, and delivered end-to-end BMDS simulations supporting various uses: Performance Assessment Simulation (utilizing DSA, MDST, and Element-provided high-resolution models) to support full-envelope BMDS performance assessment for Performance Assessment events; Real-time Digital Simulation (utilizing DSA, MDST, and Element-provided medium-resolution models) to support Warfighter Exercises, Warfighter Training, Element spiral development, and Ground Test campaign -Operated and maintained software of the Extended Air Defense Simulation (EADSIM) code base for use in Warfighter Exercises -Provided software support for PATRIOT System Effectiveness Model (PSEM) for use in Performance Assessment events -Controlled and maintained Performance Assessment Simulation "ensembles" for Element M&S development laboratory use in the Digital M&S Integration Center (DMIC) in Huntsville, AL				
FY 2013 Plans: FY 2013 activities are included in MD07 THAAD accomplishments/plans: Weapon System Engineering Integration & Test (WSEIT).				
FY 2014 Plans:				

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
FY 2014 activities are included in MD07 Terminal High Altitude Area Defense (THAAD) accomplishments/plans: THAAD Development (previously Weapon Sys Engr Integ & Test).			
Accomplishments/Planned Programs Subtotals	371.516	229.869	228.692

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

<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• 0208866C: <i>O&M</i>	201.735	259.975	256.201		256.201	288.477	314.696	301.788	310.165	0.000	1,933.037
• MD07: <i>THAAD Procurement</i>	604.650	460.728	581.005		581.005	449.665	490.621	468.607	468.607	0.000	3,523.883

Remarks

D. Acquisition Strategy

The program is closing out contract line items in the basic THAAD Engineering, Manufacturing, and Development (EMD) contract that are associated with THAAD 1.0 while continuing THAAD 2.0 contract line items. THAAD awards Indefinite Delivery Indefinite Quantity (IDIQ) Task Orders on the Advanced Capability Development (ACD) contract for the continuation of THAAD 2.0 development. The discrete task orders allow management and tracking of Development work.

E. Performance Metrics

N/A

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>
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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
THAAD Development (previously Weapon Sys Engr Integ & Test) - Advanced Capability Development	SS/IDIQ	LMSSC:Sunnyvale, CA/Huntsville, AL	0.000	38.722		38.934	Nov 2012	52.268	Nov 2013	-		52.268	Continuing	Continuing	Continuing
THAAD Development (previously Weapon Sys Engr Integ & Test) - Lockheed Martin	SS/CPAF	LMSSC:Sunnyvale, CA/Huntsville, AL	221.124	140.598		48.985	Nov 2012	37.869	Nov 2013	-		37.869	Continuing	Continuing	Continuing
THAAD Development (previously Weapon Sys Engr Integ & Test) - MDA Program Support	MIPR	Missile Defense Agency (MDA):Ft. Belvoir, VA/ Huntsville, AL	12.223	5.302		61.473	Nov 2012	4.195	Nov 2013	-		4.195	Continuing	Continuing	Continuing
THAAD Development (previously Weapon Sys Engr Integ & Test) - Models & Simulations	MIPR	US Army Research, Development, Engineering Command (RDECOM):Huntsville, AL	63.056	13.947		22.041	Nov 2012	47.814	Nov 2013	-		47.814	Continuing	Continuing	Continuing
Subtotal			296.403	198.569		171.433		142.146		0.000		142.146			

Remarks

N/A

Support (\$ 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
THAAD Program Support (previously Maintenance, Training, and Transportation) - Army Cell to Hybrid Program Office	MIPR	Integrated Material Management Center, AMCOM:Huntsville, AL	6.087	5.767		7.910	Nov 2012	0.000		-		0.000	0.000	19.764	0.000

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>
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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			
THAAD Program Support (previously Maintenance, Training, and Transportation) - MDA Program Support	Various	Missile Defense Agency (MDA):Huntsville, AL	0.000	8.249		7.899	Nov 2012	0.000		-		0.000	0.000	16.148	0.000
THAAD Program Support (previously Maintenance, Training, and Transportation) - Maintenance, Training, Transportation and Operations Support	Various	LMSSC:Sunnyvale, CA/Huntsville, AL	0.000	22.688		35.231	Nov 2012	32.315	Nov 2013	-		32.315	Continuing	Continuing	Continuing
Program Operations (previously Program Management) - Program Operations MDA Program Support	Various	Missile Defense Agency (MDA):Ft. Belvoir, VA/ Huntsville, AL	9.494	45.140		0.000		50.109	Oct 2013	-		50.109	Continuing	Continuing	Continuing
Project Redwood- Details at a Higher Classification - Special Programs	SS/FP	N/A:N/A	31.445	21.839		7.396	Oct 2012	4.122	Oct 2013	-		4.122	Continuing	Continuing	Continuing
Modeling and Simulations - Teledyne Brown Eng	SS/CPAF	Teledyne Brown Engineering:Huntsville, AL	13.090	11.113		0.000		0.000		-		0.000	0.000	24.203	0.000
Subtotal			60.116	114.796		58.436		86.546		0.000		86.546			

Remarks
N/A

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>
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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			
System Test - BMDS Ground Testing	MIPR	US Army AMRDEC:Huntsville, AL	0.000	11.638		0.000		0.000		-		0.000	0.000	11.638	0.000
System Test - Contract Support Services (CSS)	C/CPFF	Multiple to include Dynetics, L3, & TSI:Huntsville, AL	3.520	0.435		0.000		0.000		-		0.000	0.000	3.955	0.000
System Test - Flight Test Planning, Analysis, and Execution	Various	LMSSC:Sunnyvale, CA/Huntsville, AL	0.000	25.361		0.000		0.000		-		0.000	0.000	25.361	0.000
System Test - MDA Program Support	Various	MDA:Ft. Belvoir, VA/ Huntsville, AL	4.779	18.668		0.000		0.000		-		0.000	0.000	23.447	0.000
System Test - Other Government Agencies (OGA)	Various	Multiple to include WSMR, PMRF, ATEC, RDEC & SMDC:NM, HI, VA, & Huntsville, AL	33.930	2.049		0.000		0.000		-		0.000	0.000	35.979	0.000
Subtotal			42.229	58.151		0.000		0.000		0.000		0.000	0.000	100.380	0.000

Remarks
N/A

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	398.748	371.516	229.869	228.692	0.000	228.692			

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>
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	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
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Remarks
 Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</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
Battery #1 Interceptor Deliveries Complete	▲																											
Battery #2 Interceptor Deliveries Complete			▲																									
Build 2.0 Phase I Engineering Design Review (EDR)				▲																								
Conduct FTI-01 (GMD/Aegis/THAAD/PATRIOT Multiple Integration Flight Test)				▲																								
Advanced Capability Development Element Design Review (EDR)								△																				
Complete Institutional Conduct of Fire trainer (ICOFT)											△																	
Complete Institutional Training Devices												△																
Complete THAAD System Build 2.0 Phase II												△																
Build 2.1 Engineering Requirements Review (ERR)															△													
Build 2.1 Engineering Design Review (EDR)																△												
Complete THAAD System Build 2.1																				△								

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD07: <i>THAAD</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Battery #1 Interceptor Deliveries Complete	1	2012	1	2012
Battery #2 Interceptor Deliveries Complete	3	2012	3	2012
Build 2.0 Phase I Engineering Design Review (EDR)	4	2012	4	2012
Conduct FTI-01 (GMD/Aegis/THAAD/PATRIOT Multiple Integration Flight Test)	1	2013	1	2013
Advanced Capability Development Element Design Review (EDR)	1	2014	1	2014
Complete Institutional Conduct of Fire trainer (ICOFT)	4	2014	4	2014
Complete Institutional Training Devices	2	2015	2	2015
Complete THAAD System Build 2.0 Phase II	3	2015	3	2015
Build 2.1 Engineering Requirements Review (ERR)	4	2015	4	2015
Build 2.1 Engineering Design Review (EDR)	3	2016	3	2016
Complete THAAD System Build 2.1	4	2017	4	2017

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MC07: <i>Cyber Operations</i>
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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
MC07: <i>Cyber Operations</i>	-	0.000	0.000	0.530	-	0.530	0.539	0.548	0.557	0.574	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
 Project MC07 is a new Defensive Cyber Operations Project established in this Program Element (PE) for PB 2014. Funds were previously reported in Project MD01 of this PE.

A. Mission Description and Budget Item Justification
 Funding in this project sustains Missile Defense Agency (MDA) DoD Information Assurance Certification and Accreditation Program (DIACAP) and Controls Validation Testing (CVT) activities, analysis of validation results, risk assessments and reviews of proposed Program Manager/Information Assurance Manager (PM/IAM) Plans of Action and Milestones (POA&Ms) for MDA Command and Control Battle Management and Communications (C2BMC) mission systems. It maintains the Certification and Accreditation (C&A) data repository, capturing the DIACAP documentation (artifacts, validation results, and Information Assurance Risk Assessment results, and Designated Approving Authority (DAA) accreditation decisions) and POA&M on all MDA information systems. This project supports THAAD certification to operate in the BMD System.

This project supports the monitoring and tracking of Cybersecurity mitigations detailed in Information Technology security POA&Ms. Activities include preparation of C&A documentation and accreditation recommendations to the MDA Senior Information Assurance Officer (SIAO)/Certification Authority (CA) and DAA. Independent Verification and Validation (IV&V) team actions ensure the availability, integrity, authentication, confidentiality and non-repudiation of the MDA mission, test and administrative systems. Activities in the Project are necessary to comply with the Federal Information Security Management Act (FISMA).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Network / System Certification and Accreditation (C&A)	0.000	0.000	0.530
Articles:	0	0	0
Description: N/A			
FY 2012 Accomplishments: N/A			
FY 2013 Plans:			

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MC07: <i>Cyber Operations</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
N/A			
<i>FY 2014 Plans:</i> -Conduct cyber security / information assurance engineering and architecture planning for C2BMC information technology systems -Plan and test the IA controls for Ballistic Missile Defense System (BMDS) C2BMC systems -Develop C2BMC DIACAP certification and accreditation packages -Conduct Controls Validation Testing (CVT) of C2BMC mission systems and provide Plan of Action and Milestones to mitigate information assurance deficiencies -Conduct annual information assurance reviews on the C2BMC enclaves to assess compliance in implementing and maintaining IA controls			
Accomplishments/Planned Programs Subtotals	0.000	0.000	0.530

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
• 0603175C: <i>Ballistic Missile Defense Technology</i>	67.921	79.975	309.203		309.203	212.715	220.185	220.732	220.373	Continuing	Continuing
• 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
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management & Communication</i>	356.900	366.552	418.355		418.355	433.470	454.452	461.991	451.947	Continuing	Continuing
• 0603898C: <i>Ballistic Missile Defense Joint Warfighter Support</i>	36.684	55.550	47.419		47.419	47.793	53.182	54.037	54.608	Continuing	Continuing
• 0603904C: <i>Missile Defense Integration and Operations Center (MDIOC)</i>	58.970	63.043	52.131		52.131	59.893	52.005	61.751	53.511	Continuing	Continuing
• 0901598C: <i>Management HQ - MDA</i>	28.824	34.855	37.712		37.712	38.580	39.546	40.320	35.325	Continuing	Continuing
• D1300639: <i>Fort Drum, New York, IDT Complex</i>	0.000	25.900	0.000		0.000	0.000	0.000	0.000	0.000	0.000	25.900
• D1400634: <i>Clear AFS, AK</i>	0.000	0.000	17.204		17.204	0.000	0.000	0.000	0.000	0.000	17.204

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency	DATE: April 2013
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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MC07: <i>Cyber Operations</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u> <u>Base</u>	<u>FY 2014</u> <u>OCO</u>	<u>FY 2014</u> <u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MC07: <i>Cyber Operations</i>
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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			
Network / System Certification and Accreditation (C&A) - CND/IA Advisory and Assistance Services	C/CPFF	Torch Technologies: Various MDA Locations	0.000	0.000		0.000		0.530	Jul 2014	-		0.530	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		0.530		0.000		0.530			

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	0.000	0.530	0.000	0.530			

Remarks
N/A

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MT07: <i>THAAD Test</i>
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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
MT07: <i>THAAD Test</i>	-	0.000	70.928	24.547	-	24.547	118.946	32.415	65.559	76.563	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, THAAD System Test plans moved into Budget Project MT07, which is part of this Program Element 0603881C (Ballistic Missile Defense Terminal Defense Segment). Then in FY 2014 System Test plans are further broken out into Flight Test, Infrastructure, and Ground Test.

A. Mission Description and Budget Item Justification

Terminal High Altitude Area Defense (THAAD) System Test conducts Ballistic Missile Defense System (BMDS) Flight Tests and Ground Tests with other BMDS elements (including BMDS Command Control / Battle Management and Communication, PATRIOT, and Aegis) in accordance with BMDS Integrated Master Test Plan. THAAD System Test coordinates with Operational Test Agencies, conducts flight test operations, performs post-flight test reporting, and performs data distribution and data storage at Pacific Missile Range Facility and the Reagan Test Site.

THAAD Flight Testing includes mission planning, pre-flight integration testing, conduct of readiness reviews, test asset transportation, flight test execution and data collection, post flight test reporting and data distribution.

Infrastructure includes sustainment and maintenance of test equipment and facilities. It provides maintenance, repair, and fueling of THAAD Battery assets utilized in testing.

Ground Tests include mission planning, BMDS test integration, conduct of readiness reviews, ground test execution and data collection, and post test reporting and data distribution.

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

	FY 2012	FY 2013	FY 2014
Title: System Test	0.000	70.928	0.000
Articles:	0	0	0
Description: THAAD System Test includes mission planning, pre-test integration, conduct of readiness reviews, test asset transportation, test execution and data collection, post test reporting, data distribution, sustainment and maintenance of test equipment and facilities, maintenance, repair, and fueling of THAAD Battery assets utilized in testing.			
FY 2012 Accomplishments:			

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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 0603881C: <i>Ballistic Missile Defense</i> <i>Terminal Defense Segment</i>		PROJECT MT07: <i>THAAD Test</i>
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				
Plans for this scope are included in MD07 THAAD Accomplishments/Plans: System Test				
FY 2013 Plans: -Continue flight test planning, range interface, coordination with Operational Test Agencies (OTAs) and execution of flight test operations at Pacific Missile Range Facility (PMRF) for FTO-01 (BMDS Operational Flight Test) to further demonstrate in an operational scenario THAAD's ability to conduct coordinated engagements with Aegis and PATRIOT operating with BMDS Command Control / Battle Management and Communications (C2BMC) and forward-based AN/TPY-2 -Conduct THAAD participation in MDA Ground Test Campaign and Combatant Commander (COCOM) war games, and exercises, as well as Performance Assessments to evaluate system performance and interoperability within the integrated BMDS Variance Analysis: Changes from FY 2012 (MD07) to FY 2013 (MT07) due to incorporation of Integrated Master Test Plan.				
FY 2014 Plans: Plans for this scope are included in MT07 Terminal High Altitude Area Defense (THAAD) plans: Flight Test, Infrastructure, and Ground Test.				
Title: Flight Test				
				Articles:
Description: THAAD Flight Testing includes mission planning, pre-flight integration testing, conduct of readiness reviews, test asset transportation, flight test execution and data collection, post flight test reporting and data distribution.				
FY 2012 Accomplishments: Plans for this scope are included in MD07 THAAD accomplishments/plans: System Test.				
FY 2013 Plans: Plans for this scope are included in MT07 THAAD plans: System Test.				
FY 2014 Plans: -Continue flight test planning, range interface, coordination with Operational Test Agencies (OTAs) of flight test operations at Reagan Test Site (RTS) for Flight Test THAAD-11a (FTT-11a), the first Terminal High Altitude Area Defense (THAAD) engagement of a Short Range Ballistic Missile (SRBM) with associated objects and demonstration of the radar advanced algorithm. -Complete Flight Test Operational-01 (FTO-01) post test reporting and data distribution to provide data for analysis and integration into BMDS Modeling and Simulation.				
Title: Infrastructure				
				Articles:

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>		PROJECT MT07: <i>THAAD Test</i>			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012	FY 2013	FY 2014
<p>Description: Infrastructure includes sustainment and maintenance of test equipment and facilities. It provides maintenance, repair, and fueling of THAAD Battery assets utilized in testing.</p> <p>FY 2012 Accomplishments: Plans for this scope are included in MD07 THAAD accomplishments/plans: System Test.</p> <p>FY 2013 Plans: Plans for this scope are included in MT07 THAAD plans: System Test.</p> <p>FY 2014 Plans: -Provide data management, facilities operations, and post-test reporting in support of Ballistic Missile Defense System (BMDS) System Tests to ensure data collection and readiness for mission execution -Provide on-site range support for Terminal High Altitude Area Defense (THAAD) maintenance, repair, and fueling to ensure readiness of the THAAD test assets -Sustain and maintain THAAD Launch and Test Support Equipment (L&TSE) to ensure readiness of the THAAD test equipment</p>						
<p>Title: Ground Test</p> <p align="right">Articles:</p>				0.000 0	0.000 0	8.742 0
<p>Description: Ground Tests includes mission planning, BMDS test integration, conduct of readiness reviews, ground test execution and data collection, post test reporting and data distribution.</p> <p>FY 2012 Accomplishments: Plans for this scope are included in MD07 THAAD accomplishments/plans: System Test.</p> <p>FY 2013 Plans: Plans for this scope are included in MT07 THAAD plans: System Test.</p> <p>FY 2014 Plans: -Continue THAAD participation in Missile Defense Agency (MDA) Ground Test operational scenario events (GT-04 and GT-06 campaigns) to ensure THAAD's ability to conduct coordinated engagements with Aegis and PATRIOT operating with Command and Control, Battle Management, Communications (C2BMC) and forward-based Army Navy Transportable Radar Surveillance and Control (AN/TPY-2) -Continue Performance Assessments to evaluate system performance and interoperability within the integrated Ballistic Missile Defense System (BMDS)</p>						
Accomplishments/Planned Programs Subtotals				0.000	70.928	24.547

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MT07: <i>THAAD Test</i>

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

N/A

Remarks

D. Acquisition Strategy

The program is closing out contract line items in the basic THAAD Engineering, Manufacturing, and Development (EMD) contract that are associated with THAAD 1.0 while continuing THAAD 2.0 contract line items. THAAD awards Indefinite Delivery Indefinite Quantity (IDIQ) Task Orders on the Advanced Capability Development (ACD) contract for the continuation of THAAD 2.0 development. The discrete task orders allow management and tracking of Development work.

E. Performance Metrics

N/A

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MT07: <i>THAAD Test</i>
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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			
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

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			
System Test - BMDS Ground Testing and Flight Test Support	MIPR	US Army AMRDEC:Huntsville, AL	0.000	0.000		19.313	Nov 2012	0.000		-		0.000	0.000	19.313	0.000
System Test - Flight Test Planning, Analysis, and Execution	Various	LMSSC:Sunnyvale, CA/Huntsville, AL	0.000	0.000		18.583	Nov 2012	0.000		-		0.000	0.000	18.583	0.000
System Test - Flight Test Range Infrastructure/ Execution	MIPR	Reagan Test Site:Kwajalein Atoll	0.000	0.000		12.604	Nov 2012	0.000		-		0.000	0.000	12.604	0.000
System Test - Flight Test Support and Planning	Various	MDA:Ft. Belvoir, VA/ Huntsville, AL	0.000	0.000		20.428	Nov 2012	0.000		-		0.000	0.000	20.428	0.000
Flight Test - Planning, Analysis, and Execution	Various	LMSSC:Sunnyvale, CA/Huntsville, AL	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MT07: <i>THAAD Test</i>
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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			
Flight Test - Support and Planning	Various	MDA:Ft. Belvoir, VA/Huntsville, AL	0.000	0.000		0.000		4.110	Nov 2013	-		4.110	Continuing	Continuing	Continuing
Infrastructure - Range Infrastructure	Various	MDA:Ft. Belvoir, VA/Huntsville, AL	0.000	0.000		0.000		9.244	Nov 2013	-		9.244	Continuing	Continuing	Continuing
Infrastructure - Range Infrastructure Prime	Various	LMSSC:Sunnyvale, CA/Huntsville, AL	0.000	0.000		0.000		2.451	Nov 2013	-		2.451	Continuing	Continuing	Continuing
Ground Test - BMDS Ground Test Support	MIPR	US Army AMRDEC:Huntsville, AL	0.000	0.000		0.000		5.134	Nov 2013	-		5.134	Continuing	Continuing	Continuing
Ground Test - Support and Planning	Various	MDA:Ft. Belvoir, VA/Huntsville, AL	0.000	0.000		0.000		3.608		-		3.608	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		70.928		24.547		0.000		24.547			

Remarks
N/A

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	0.000	70.928	24.547	0.000	24.547			

Remarks
N/A

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MT07: <i>THAAD Test</i>
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Significant Event Complete ▲ Milestone Decision Complete ★ Element Test Complete ◆ System Level Test Complete ● Complete Activity ✦
 Significant Event Planned △ Milestone Decision Planned ☆ Element Test Planned ◇ System Level Test Planned ○ Planned Activity ✧

	FY 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
Conduct FTO-01 (GMD/Aegis/THAAD/PATRIOT Multiple Engagement Flight Test)							△																					
Fast Event 1											△																	
Fast Event 2											△																	
Conduct FTT-11a (THAAD Intercept Flight Test)															△													
Conduct FTO-2 (GMD/Aegis/THAAD/PATRIOT Multiple Engagement Flight Test)																△												
Conduct FTT-15 (THAAD Intercept Flight Test)																							△					
Conduct FTO-03 (GMD/Aegis/THAAD/PATRIOT Multiple Engagement Flight Test)																												△

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MT07: <i>THAAD Test</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Conduct FTO-01 (GMD/Aegis/THAAD/PATRIOT Multiple Engagement Flight Test)	3	2013	3	2013
Fast Event 1	3	2014	3	2014
Fast Event 2	3	2014	3	2014
Conduct FTT-11a (THAAD Intercept Flight Test)	3	2015	3	2015
Conduct FTO-2 (GMD/Aegis/THAAD/PATRIOT Multiple Engagement Flight Test)	4	2015	4	2015
Conduct FTT-15 (THAAD Intercept Flight Test)	2	2017	2	2017
Conduct FTO-03 (GMD/Aegis/THAAD/PATRIOT Multiple Engagement Flight Test)	4	2018	4	2018

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD06: <i>Patriot Advanced Capability-3 (PAC-3)</i>
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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
MD06: <i>Patriot Advanced Capability-3 (PAC-3)</i>	34.720	1.156	1.145	1.091	-	1.091	1.108	1.219	1.240	1.257	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

Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.

A. Mission Description and Budget Item Justification

PATRIOT (Phased Array Tracking Radar Intercept Of Target) Advanced Capability (PAC-3) is one of the most mature elements of the Ballistic Missile Defense System (BMDS) and is now operational with the U.S. Army. It is a land-based element built upon the proven PATRIOT air and missile defense infrastructure.

The Army is responsible for production and further development of Advanced Capability-3 System; the Missile Defense Agency remains responsible for the Ballistic Missile Defense System interoperability and integration efforts. Lower Tier Project Office (LTPO) will utilize MDA funds to further the integration of PATRIOT into the BMDS. Support includes software coding, performance testing, flight testing and integration activities and modifications to cope with evolving threats.

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

	FY 2012	FY 2013	FY 2014
Title: General Support	1.156	1.145	1.091
Articles:	0	0	0
Description: PATRIOT Advanced Capability (PAC-3) is a U.S. Army short range BMDS that interfaces with the BMDS. MDA funds PATRIOT participation in BMDS interoperability integration efforts.			
FY 2012 Accomplishments:			
-Support the day-to-day tasking that is leveraged upon Lower Tier Project Office (LTPO) by Missile Defense Agency (MDA) based on the Transfer and Transition Plan Annex L.			
FY 2013 Plans:			
-Support the day-to-day tasking that is leveraged upon Lower Tier Project Office (LTPO) by Missile Defense Agency (MDA) based on the Transfer and Transition Plan Annex L.			
FY 2014 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Missile Defense Agency	DATE: April 2013
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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD06: <i>Patriot Advanced Capability-3 (PAC-3)</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
-Support the day-to-day tasking that is leveraged upon Lower Tier Project Office (LTPO) by Missile Defense Agency (MDA) based on the Transfer and Transition Plan Annex L.			
Accomplishments/Planned Programs Subtotals	1.156	1.145	1.091

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

N/A

Remarks

D. Acquisition Strategy

The planned acquisition strategy for PATRIOT (Phased Array Tracking Radar Intercept on Target) support awards Task Orders on multiple contract vehicles and memorandum of Agreements with other government agencies. The program is considering opportunities for potential competitive awards.

E. Performance Metrics

N/A

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD06: <i>Patriot Advanced Capability-3 (PAC-3)</i>
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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			
General Support - Evolutionary Development Program (EDP) Task 2	SS/FFP	Multiple:Multiple	32.360	0.000		0.000		0.000		-		0.000	32.360	64.720	32.360
Subtotal			32.360	0.000		0.000		0.000		0.000		0.000	32.360	64.720	32.360

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			
General Support - General Support	C/FFP	ITT/CAS:Huntsville, AL	2.360	1.156		1.145	Jan 2013	1.091	Jan 2014	-		1.091	Continuing	Continuing	Continuing
Subtotal			2.360	1.156		1.145		1.091		0.000		1.091			

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

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD06: <i>Patriot Advanced Capability-3 (PAC-3)</i>
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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	34.720	1.156	1.145	1.091	0.000	1.091			

Remarks
Funding in the All Prior Years column represents a summary of Prior Years Total Costs for active contracts, Military Interdepartmental Purchase Requests, and civilian salaries on the R-3.

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD40: <i>Program-Wide Support</i>
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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>	-	8.369	14.987	14.130	-	14.130	15.073	11.687	14.829	14.188	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
N/A

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	8.369	14.987	14.130
Articles:	0	0	0
Description: N/A			
FY 2012 Accomplishments: See paragraph A: Mission Description and Budget Item Justification			
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	8.369	14.987	14.130

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</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

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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 0603881C: <i>Ballistic Missile Defense Terminal Defense Segment</i>	PROJECT MD40: <i>Program-Wide Support</i>
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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 Operations Management	C/CPAF	Various:Multi: AL, CA, CO, VA	0.000	0.000		1.258	Mar 2013	1.125	Mar 2014	-		1.125	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support International and Materiel and Readiness	MIPR	Various:Multi: AL, VA, Aust, Japan	0.000	0.000		1.278	Oct 2012	1.499	Oct 2013	-		1.499	Continuing	Continuing	Continuing
Program Wide Support - Agency Operations and Support Services	C/CPFF	Various:Multi: AL, VA	0.000	8.369		11.881	Jan 2013	11.206	Jan 2014	-		11.206	Continuing	Continuing	Continuing
Program Wide Support - FFRDC/UARC	C/CPAF	Various:Multi: AL, VA	0.000	0.000		0.570	Oct 2012	0.300	Oct 2013	-		0.300	Continuing	Continuing	Continuing
Subtotal			0.000	8.369		14.987		14.130		0.000		14.130			

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	8.369	14.987	14.130	0.000	14.130			

Remarks
N/A