Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Missile Defense Agency										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 ITEM NOMENCLATURE PE 0603904C: *Missile Defense Integration & Operations Center (MDIOC)*						

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	83.112	69.249	63.043	-	63.043	54.299	55.409	54.693	55.844	Continuing	Continuing
MD22: *Missile Defense Integration and Operations Center (MDIOC)*	80.116	66.408	59.842	-	59.842	51.558	52.702	51.993	53.009	Continuing	Continuing
MD40: *Program-Wide Support*	2.996	2.841	3.201	-	3.201	2.741	2.707	2.700	2.835	Continuing	Continuing

Note

The FY 2012 and FY 2013 decrease`s are a result of DoD realignment to higher priorities.

A. Mission Description and Budget Item Justification

The Missile Defense Integration and Operations Center (MDIOC) is Missile Defense Agency`s (MDA) field operating activity in Colorado Springs, Colorado. It provides the necessary infrastructure and support services through a mission execution platform for MDA elements/components and designated Combatant Commanders` Ballistic Missile Defense System (BMDS) operations executing missions at the MDIOC. The Integration Center is the organization responsible for providing a single, integrated set of skilled personnel matrixed from across MDA to manage this mission. The MDIOC mission facilities consists of a highly secure research and development complex and a mission support module (area) located within a military installation (Schriever Air Force Base) that is adjacent to North American Aerospace Defense Command (NORAD) and United States Northern Command (USNORTHCOM). The MDA Integration Center provides mission critical system technical capabilities and subject matter expertise in a dedicated and adaptable environment that enables developers, testers, and operators to evolve, assess and deliver the capabilities for layered missile defense execution for homeland defense and theater/regional support. The Missile Defense Integration and Operations Center (MDIOC) interfaces with the Information Technology/Information Assurance Enterprise to provide high availability access to worldwide secure communications, network health and status monitoring, mission critical restoral capability, and technical expertise for all MDA directed activities and events. The MDIOC functions as the mission control for BMDS distributed ground test and system wide flight tests. The mission and test directors for these key tests control both main and associated test operations using secure voice, test, and mission network hubs at the MDIOC. The MDIOC also functions (within MDA`s capabilities-based acquisition strategy) as the only system-level integration and interoperability mission execution platform for BMDS fire control; and it provides the physical interface between the developers and the Combatant Command warfighters.

MDIOC mission facilities contribute to the BMDS by directly supporting the concept of Concurrent Test, Training, and Operations (CTTO) for the BMDS. The MDIOC accomplishes this by providing engineering integration, resource scheduling, configuration management, and implementation development support for MDA and BMDS-level test, training, and operational mission execution. The Integration Center provides engineering and operational integration by:

-Implementing the technical event architectures for the models and simulations used to support missile defense planning seminars,wargames, exercises, and analyses
-Supporting the planning and execution of the only end-to-end operator-in-the-loop/element-in-the-loop missile defense wargames
-Supporting BMDS Critical Engagement Conditions (CEC) testing and analysis by operating the Test Execution Control (TEC) for distributed BMDS ground tests (i.e. GTX, GTI, and GTD), and ensuring the integrity of their technical system architecture
-Providing network operations and information assurance for all on-site integration activities

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Missile Defense Agency	DATE: February 2012
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-Integrating and sustaining the enabling infrastructure, services, and processes that support the operation of designated elements of the BMDS and resident Combatant Command operations and/or support centers
-Providing technical support for the BMDS Watch Officers, BMDS Safety Officers, and Information Assurance Officers in their efforts to monitor and assess the health and status of the networks and elements that impact BMDS test and operations
-Operating the Joint Early Warning Laboratory for anomaly resolution
-Supporting the Intelligence Support Center for critical situational awareness intelligence on worldwide ballistic missile developments that could affect the development and/or operation of the BMDS

Missile Defense Integration and Operations Center (MDIOC) Major Program Goals

-Provide the capabilities and services necessary to support engineering integration, resource scheduling for ground and flight tests, configuration management, and implementation development support of on-site activities
-Ensure around the clock support and restoral of designated BMDS operational activities
-Improve interface with designated Combatant Command missile defense activities; host/support the headquarters and operations center for United States Strategic Command Joint Functional Component Command - Integrated Missile Defense
-Continue to achieve cost effectiveness and efficiencies through the leveraging of existing Missile Defense Integration and Operations Center infrastructure, services, processes, and expertise to support assigned missions
-Maintain and improve as designated the reliability, availability, and maintainability of mission critical systems

MD40 consists of Program-Wide Support non-headquarters management costs in support of MDA functions and activities across the entire Ballistic Missile Defense System .

B. Program Change Summary ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	86.198	69.325	64.514	-	64.514
Current President's Budget	83.112	69.249	63.043	-	63.043
Total Adjustments	-3.086	-0.076	-1.471	-	-1.471
• Congressional General Reductions	-0.586	-0.076			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-2.500	-			
• Other Adjustment	-	-	-1.471	-	-1.471

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Change Summary Explanation

The FY 2011 decrease of $3.086M reflects $2.5M for program adjustments for Small Business Innovation Research Program/Small Business Technology Transfer (SBIR/STTR) and $.586M for DoD priorities.

The FY 2012 decrease of $.076M reflects realignment to Department of Defense priorities.

The FY 2013 decrease of $1.471M reflects realignment to Department of Defense priorities.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	PROJECT MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
MD22: *Missile Defense Integration and Operations Center (MDIOC)*	80.116	66.408	59.842	-	59.842	51.558	52.702	51.993	53.009	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

Note

   N/A

A. Mission Description and Budget Item Justification

   The Missile Defense Integration and Operations Center (MDIOC) sustains and operates a 24 hours a day, 7 days a week, 365 days a year mission complex for critical research, development, testing, training, and operations for BMDS activities. The MDIOC supports the Ground-based Midcourse Missile Defense Mission Control Center Facility, as well as the Command, Control, Battle Management, and Communications (C2BMC) Integration and Test Centers and the C2BMC Experimentation Laboratories. It provides infrastructure support for the Satellite Tracking and Surveillance System`s (STSS) Missile Defense Space Development Center (MDSDC); and the Targets and Countermeasures` (TC) Joint Target Operations Center (JTOC). The MDIOC also provides developmental support to the Enterprise Sensors Laboratory (ESL) composed of a common satellite ground station and sensor netting test bed for designated Ballistic Missile Defense System (BMDS) elements. It supports BMDS Critical Engagement Conditions testing and analysis through the operation of the Test Execution Control node for distributed BMDS ground tests. During system flight test, the MDIOC provides infrastructure (power, Heating, Ventilation and Air Conditioning, and communications) support to the Flight Test Director and crew, and ensures the protection of those critical facility and test assets throughout the test window. Further, the MDIOC provides the facilities that support operations of the Missile Defense Element, manned by the U.S. Army 100th Missile Defense Brigade, the United States Northern Command (USNORTHCOM) Command, Control, Battle Management and Communications (C2BMC) Command and Control Center (CCC), the United States Strategic Command`s (USSTRATCOM`s) Joint Functional Component Command-Integrated Missile Defense (JFCC-IMD) and the Missile Defense Agency (MDA) Warfighter Support Center. In addition, the MDIOC supports the MDA Operations Support Center, which provides situational awareness of the health and status of the end-to-end BMDS, provides network subject matter expertise and technical reach back for the program elements and Combatant Commanders. The MDIOC hosts BMDS wargames and exercises in support of the warfighter, and delivers requisite infrastructure for modeling and simulation to provide and integrate digital modeling and simulation assets to the Digital Simulation Architecture that form system-level constructive simulations for full-envelope BMDS performance assessment with surrogate capability for BMDS ground tests. The MDIOC maintains a technical repository of BMDS Implementation Architectures for real-time operations and configuration control; provides both state change management and asset management technical support for the BMDS; and provides the technical environment for BMDS Watch Officers, Safety Officers, and Information Assurance Officers to execute their assigned duties. The MDIOC also supports the operations of the Joint Early Warning Laboratory (JEWL), which provides USSTRATCOM with quick response analyses of real-world launches, and rapid anomaly identification and resolution.

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

	FY 2011	FY 2012	FY 2013
Title: Infrastructure Systems and Support	20.532	21.102	25.595
Articles:	0	0	0

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Description: See Description Below *FY 2011 Accomplishments:* -Computing Center (Operating Systems, Print/Storage Services, Audio/Visual, Operations and Maintenance) -Maintained a mission execution platform to provide an enabling infrastructure (to include hardware, software maintenance, licenses, and upgrades) that supports MDA Research, Development, Test and Evaluation (RDT&E) efforts at the MDIOC for the MDA elements/components, and Combatant Command and Wrfighter operational elements -Provided computer hosting of specified threat models and supported the integration of other threat tools as required -Planned/Initiated, when directed, the installation of any additional data feeds required to support the Operations Support Center (OSC) -Provided file, print, and messaging services; managed and maintained automated patching software, and virus protection servers. Managed and maintained the MDA Enterprise directory services supporting user access to MDA Enterprise network resources; performed preventive maintenance and ensured data recovery capability through proper data backup scheduling and execution -Planned/Designed enhancements to the Missile Defense Integration and Operations Center (MDIOC) Data Center including floor space allocations, equipment staging areas, and streamlined logistics support function -Designed/Implemented upgrades to audio/visual support to the MDIOC supporting the distribution of signals over Internet Protocol -MDIOC Communication Services -Installed communications and networking infrastructure)hardware/software) in support of evolving mission requirements of resident MDA development, testing, training, and operational activities -Implemented Classified and Unclassified Voice Over Internet Protocol (VOIP) expansion to include the completion of the Missile Defense Integration and Operations Center (MDIOC) VOIP implementation -Provided telephony service to include: Telephone/Fax Service: Provided local, long distance, Defense Switch Network and Defense Red Switch telephone systems. Telephone Switch Operations: Operated, maintained, and upgraded telephone switches, nodes, and Private Branch Exchanges to include 911 support -Network Management Transport Services -Acquired and distributed mission critical unclassified and secure communications capability to ten resident MDA elements/ components and BMDS and Wafighter operational elements			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Provided management of network capabilities by monitoring and controlling the network infrastructure, available bandwidth, hardware, and distributed software resources. -Maintained the technical infrastructure and equipment which includes, routers and switches, Core Cryptographic Devices; Edge Encryption Devices; Global Engagement Manager (GEM); base and long-haul communications -Information Assurance Systems: -Provided information assurance to MDA elements/components, BMDS elements, and Combatant Command (COCOM) and Wafighter operational elements resident at the Missile Defense Integration and Operations Center (MDIOC) -Maintained DoD Information Assurance Certification and Accreditation Process (DIACAP) accreditation packages; manage the Information Assurance Vulnerability Assessment Program and provided technical assistance to Controls Validation Tests -Provided DoD Information Assurance Certification and Accreditation (DIACAP) package management; ensured timely submissions to Information Assurance Manager/Designated Approval Authority (IAM/DAA) for MDA Admin/General Services (GENSER) and Event Packages -Performed architecture design, engineering, and configuration management reviews for all assigned projects -Managed the Information Assurance Vulnerability Assessment and Communications Tasking Order remediation and implementation efforts to ensure Defense Information Systems Agency/Joint Task Force - Global Network Operations (DISA/JTF-GNO) directed compliance -Infrastructure Implementation Engineering: -Implemented intelligence hardware/software updates as required to support the Operations Support Center -Provided MDIOC centric test event network related detailed designs in support of Test Events and real world operational events, provided implementation plans, updated interface control documents and performed Change Control and Configuration Management services -Planned, designed, tested and operated the IT and communications technical architecture including Internet Protocol addressing schema, routing tables, switching policies, data paths, information assurance controls, fire wall configurations, application configurations, band width allocations for sub networks and eventual post event return to base line -Provided technical health and status monitoring, troubleshooting, and break/fix, IT/Communications support for each of the event architectures including critical asset identification, monitoring, Quality Assurance/Quality Control (QA/QC) seals with configuration management and job control -Implemented final Defense Information Systems Agency Global Information Grid (DISA GIG) Mission Assurance node configuration -Software Licenses, Services and Applications:			

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Missile Defense Agency		**DATE:** February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013**
-Maintained critical software licensing and maintenance agreements to meet critical customer and legal requirements, enabled continued software support necessary to maintain the directed computer network defense posture and ensured continued system operational availability -Planned/Designed/Implemented technical lifecycle, refresh, and standardization of MDIOC print services -Implemented MDIOC web cam upgrade and technology refresh -Implemented a consolidated Microsoft Project Server and delivered as a web based service *FY 2012 Plans:* -Computing Center (Operating Systems, Print/Storage Services, Audio/Visual, Operations and Maintenance) -Continue to maintain a mission execution platform to provide an enabling infrastructure (to include hardware, software maintenance, licenses, and upgrades) that supports MDA Research, Development, Test and Evaluation (RDT&E) efforts at the Missile Defense Integration and Operations Center (MDIOC) for the MDA elements/components, and Combatant Command and Wrfighter operational elements -Provide computer hosting of specified threat models and support the integration of other threat tools as required -Plan/Initiate, when directed, the installation of any additional intelligence data feeds required to support the Operations Support Center (OSC) -Provide file, print, and messaging services; manage and maintain automated patching software, and virus protection servers. Manage and maintain the MDA Enterprise directory services supporting user access to MDA Enterprise network resources; perform preventive maintenance and ensure data recovery capability through proper data backup scheduling and execution -Plan/Design enhancements to the MDIOC Data Center including floor space allocations, equipment staging areas, and streamlined logistics support function -Design/Implement upgrades to audio/visual support to the MDIOC cafeteria supporting the distribution of signals over Internet Protocol MDIOC Communication Services: -Install communications and networking infrastructure (hardware/software) in support of evolving mission requirements of resident MDA development, testing, training, and operational activities -Implement Class and Unclassified Voice Over Internet Protocol (VOIP) expansion to include the completion of the Missile Defense Integration and Operations Center (MDIOC) VOIP implementation -Provide telephony services to include: Telephone/Fax Service: Provide local, long distance and Defense Switch Network telephone systems. Telephone Switch Operations: Operate, maintain, and upgrade telephone switches, nodes, and Private Branch Exchanges to include 911 support			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Network Management Transport Services: -Acquire and distribute mission critical unclassified and secure communications capability to ten resident MDA elements/ components and BMDS and Warfighter operational elements -Provide management of network capabilities by monitoring and controlling the network infrastructure, available bandwidth, hardware, and distributed software resources -Maintain the technical infrastructure and equipment which includes, routers and switches, Core Cryptographic Devices; Edge Encryption Devices; Global Engagement Manager (GEM); base and long-haul communications Information Assurance Systems: -Provide information assurance to MDA elements/components, BMDS elements, and Combatant Command (COCOM) and Warfighter operational elements resident at the Missile Defense Integration and Operations Center (MDIOC) -Maintain DoD Information Assurance Certification and Accreditation Process (DIACAP) accreditation packages; manage the Information Assurance Vulnerability Assessment Program and provide technical assistance to Controls Validation Tests -Provide DoD Information Assurance Certification and Accreditation Process (DIACAP) package management; ensure timely submissions to Information Assurance Manager/Designated Accrediting Authority (IAM/DAA) for MDA Administrative/General Services (GENSER) and Event Packages -Perform architecture design, engineering, and configuration management reviews for all assigned projects -Manage the Information Assurance Vulnerability Assessment and Communications Tasking Order remediation and implementation efforts to ensure Defense Information Systems Agency/Joint Task Force - Global Network Operations (DISA/JTF-GNO) directed compliance Infrastructure Implementation Engineering: -Implement intelligence hardware/software updates as required to support the Operations Support Center -MDIOC centric test event network related detailed designs in support of Test Events and real world operational events, provide implementation plans, update interface control documents and perform Change Control and Configuration Management services -Plan, design, test and operate the IT and communications technical architecture including Internet Protocol addressing schema, routing tables, switching policies, data paths, information assurance controls, fire wall configurations, application configurations, band width allocations for sub networks and eventual post event return to base line -Provide technical health and status monitoring, troubleshooting, and break/fix, IT/Communications support for each of the event architectures including critical asset identification, monitoring, Quality Assurance/Quality Control (QA/QC) seals with configuration management and job control			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Implement final Defense Information Systems Agency - Global Information Grid (DISA GIG) Mission Assurance node configuration Software Licenses, Services and Applications: -Maintain critical software licensing and maintenance agreements to meet critical customer and legal requirements, enable continued software support necessary to maintain the directed computer network defense posture and ensure continued system operational availability -Plan/Design/Implement technical lifecycle, refresh, and standardization of MDIOC print services -Implement MDIOC web cam upgrade and technology refresh -Implement a consolidated MS Project Server and deliver as a web based service *FY 2013 Plans:* -Computing Center (Operating Systems, Print/Storage Services, Audio/Visual, Operations and Maintenance): -Continue to maintain a mission execution platform to provide an enabling infrastructure (to include hardware, software maintenance, licenses, and upgrades) that supports MDA Research, Development, Test and Evaluation (RDT&E) efforts at the Missile Defense Integration and Operations Center (MDIOC) for the MDA elements/components, and Combatant Command and Warfighter operational elements -Provide computer hosting of specified threat models and support the integration of other threat tools as required -Plan/Initiate, when directed, the installation of any additionalï¿½data feeds required to support the Operations Support Center (OSC) -Provide file, print, and messaging services; manage and maintain automated patching software, and virus protection servers. Manage and maintain the MDA Enterprise directory services supporting user access to MDA Enterprise network resources; perform preventive maintenance and ensure data recovery capability through proper data backup scheduling and execution -Plan/Design enhancements to the MDIOC Data Center including floor space allocations, equipment staging areas, and streamlined logistics support function -Design/Implement upgrades to audio/visual support to the MDIOC supporting the distribution of signals over Internet Protocol -MDIOC Communication Services: -Install communications and networking infrastructure (hardware/software) in support of evolving mission requirements of resident MDA development, testing, training, and operational activities -Implement Classified and Unclassified Voice Over Internet Protocol (VOIP) expansion to include the completion of the MDIOC VOIP implementation			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Provide telephony services to include: Telephone/Fax Service: Provide local, long distance, Defense Switch Network and Defense Red Switch telephone systems. Telephone Switch Operations: Operate, maintain, and upgrade telephone switches, nodes, and Private Branch Exchanges to include 911 support -Network Management Transport Services: -Acquire and distribute mission critical unclassified and secure communications capability to ten resident MDA elements/ components and BMDS and Warfighter operational elements -Provide management of network capabilities by monitoring and controlling the network infrastructure, available bandwidth, hardware, and distributed software resources -Maintain the technical infrastructure and equipment which includes, routers and switches, Core Cryptographic Devices; Edge Encryption Devices; Global Engagement Manager (GEM); base and long-haul communications -Information Assurance Systems -Provide information assurance to MDA elements/components, BMDS elements, and Combatant Command (COCOM) and Warfighter operational elements resident at the Missile Defense Integration and Operations Center (MDIOC) -Maintain DoD Information Assurance Certification and Accreditation Process (DIACAP) accreditation packages; manage the Information Assurance Vulnerability Assessment Program and provide technical assistance to Controls Validation Tests -Provide DoD Information Assurance Certification and Accreditation Process (DIACAP) package management; ensure timely submissions to Information Assurance Manager/Designated Accrediting Authority (IAM/DAA) for MDA Admin/General Services (GENSER) and Event Packages -Perform architecture design, engineering, and configuration management reviews for all assigned projects -Manage the Information Assurance Vulnerability Assessment and Communications Tasking Order remediation and implementation efforts to ensure Defense Information Systems Agency/Joint Task Force - Global Network Operations (DISA/JTF-GNO) directed compliance -Infrastructure Implementation Engineering: -Implement intelligence hardware/software updates as required to support the Operations Support Center -Provide MDIOC centric test event network related detailed designs in support of Test Events and real world operational events, provide implementation plans, update interface control documents and perform Change Control and Configuration Management services -Plan, design, test and operate the IT and communications technical architecture including Internet Protocol addressing schema, routing tables, switching policies, data paths, information assurance controls, fire wall configurations, application configurations, band width allocations for sub networks and eventual post event return to base line			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Provide technical health and status monitoring, troubleshooting, and break/fix, IT/Communications support for each of the event architectures including critical asset identification, monitoring, Quality Assurance/Quality Control (QA/QC) seals with configuration management and job control -Implement final Defense Information Systems Agency - Global Information Grid (DISA GIG) Mission Assurance node configuration -Software Licenses, Services and Applications: -Maintain critical software licensing and maintenance agreements to meet critical customer and legal requirements, enable continued software support necessary to maintain the directed computer network defense posture and ensure continued system operational availability -Plan/Design/Implement technical lifecycle, refresh, and standardization of MDIOC print services -Implement MDIOC web cam upgrade and technology refresh -Implement a consolidated Microsoft Project Server and deliver as a web based service			
Title: Facilities and Maintenance *Articles:* *Description:* See Description Below ***FY 2011 Accomplishments:*** -Utilities (Electrical, Gas, Sewer, Water, Steam,ï¿½and Chilled Water): -Procured utility services through 50th Air Force Space Wing (Host Base) -Sustained utility infrastructure and delivery systems -Environmental, Safety and Occupational Health (ESOH): -Continued maintenance and updating of the program accident prevention plan -Provided required industrial safety training to facility services personnel -Procured and distributed personal protection equipment for contracted activities -Ensured compliance with Hazardous Waste/Hazardous Material/Recycling, and National Environmental Policy Act (NEPA) programs -Conducted recurring safety and environmental audits -Facilities Operations and Sustainment:	18.755 0	19.056 0	18.583 0

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013**
-Provided 24 hours a day, 7 days a week, 365 days a year, facility maintenance break/fix response for all facility systems (electrical; Heating, Ventilation, and Air Conditioning; plumbing; locksmith) -Conducted preventive maintenance inspections (PMIs) for all building systems -Facilities Repair & Sustainment: -Upgraded facility electrical distribution system for dual redundancy (Phase II) -Replaced roof on Building 730 -Replaced incoming main electrical power switchgear -Installed Enhanced Electronic Security System -Facilities Engineering: -Conducted Management Process/Facility Installation Standard Audits -Provided risk management analysis and mitigation plans -Maintained infrastructure drawings/configuration management databases -Developed and documented facility long range planning/programming -Provided consulting services, preliminary designs and engineering/rough order of magnitude estimates for required infrastructure builds/changes -Missile Defense Integration and Operations Center (MDIOC) Operating Expenses: -Leased General Services Administration (GSA) Vehicles and two commercial warehouses -Funded Schriever Air Force Base Support Costs (Defense Red Switch Network (DRSN) Support, Local Dial Tone, Long Distance, and Cable TV) -Facility Services: -Provided custodial services for over 675,000 square feet of floor space in Buildings 720/730 -Provided limited Copy Center and Shuttle Services for over 2,000 personnel -Provided In/Out Processing and Personnel Moves -Cable Plant/Cubicle/Workstation: -Installed facility connectivity cabling; provided trouble shooting and repair -Installed and reconfigured furniture and workstations -Independent Assessments: -Conducted root cause analysis and consulting services as required			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Conducted an electrical coordination study of technical and non-technical services -Provided Quality Assurance Assessments ***FY 2012 Plans:*** Utilities (Electrical, Gas, Sewer, Water, Steam, & Chilled Water): -Procure utility services through 50th AF Space Wing (Host Base) -Sustain utility infrastructure and delivery systems Environmental, Safety & Occupational Health (ESOH): -Continue maintenance and updating of the program accident prevention plan -Provide required industrial safety training to facility services personnel -Procure and distribute personal protection equipment for contracted activities -Ensure compliance with Hazardous Waste/Hazardous Material/Recycling, and National Environmental Policy Act (NEPA) programs -Conduct recurring safety and environmental audits Facilities Operations and Sustainment: -Provide 24 hours a day, 7 days a week, 365 days a year, facility maintenance break/fix response for all facility systems (electrical; Heating, Ventilation, and Air Conditioning; plumbing; locksmith) extended from 15 minute response to two hour response time after normal duty hours -Conduct preventative maintenance inspections (PMIs) for all building systems Facilities Repair & Sustainment: -Provide emergency response and repair of infrastructure systems Facilities Engineering: -Conduct Management Process/Facility Installation Standard Audits -Provide risk management analysis and mitigation plans -Maintain infrastructure drawings/configuration management databases on a limited/minimum basis			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	**PROJECT** MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Develop and document facility long range planning/programming -Provide consulting services, preliminary designs and engineering/rough order of magnitude estimates for required infrastructure builds/changes Missile Defense Integration and Operations Center (MDIOC) Operating Expenses: -Lease General Services Administration (GSA) Vehicles and two commercial warehouses -Fund Schriever AFB Support Costs (Defense Red Switch Network (DRSN) Support, Local Dial Tone, Long Distance, Cable TV, & Grounds Maintenance) Facility Services: -Provide custodial services for over 675,000 square feet of floor space in Buildings 720/730 -Provide limited Copy Center and Shuttle Services for over 2,000 personnel -Provide In/Out Processing & Personnel Moves Cable Plant/Cubicle/Workstation: -Install facility connectivity cabling; provide trouble shooting and repair on a critical basis -Install and reconfigure furniture and workstations on a critical basis *FY 2013 Plans:* -Utilities (Electrical, Gas, Sewer, Water, Steam, and Chilled Water): -Procure utility services through 50th Air Force Space Wing (Host Base) -Sustain utility infrastructure and delivery systems -Environmental, Safety and Occupational Health (ESOH): -Continue maintenance and updating of the program accident prevention plan -Provide required industrial safety training to facility services personnel -Procure and distribute personal protection equipment for contracted activities -Ensure compliance with Hazardous Waste/Hazardous Material/Recycling, and National Environmental Policy Act (NEPA) programs -Conduct recurring safety and environmental audits			

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APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	**PROJECT** MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Facilities Operations and Sustainment: -Provide 24 hours a day, 7 days a week, 365 days a year, facility maintenance break/fix response for all facility systems (electrical; Heating, Ventilation, and Air Conditioning; plumbing; locksmith) response time extended from 15 minutes to two hours after normal duty hours -Conduct preventative maintenance inspections (PMIs) for all building systems -Facilities Repair & Sustainment: -Electrical distribution upgrades design phase III -Electrical distribution upgrades implementation phase III -Emergency lighting module replacement -Replace building exterior panel sealant phase II and phase III -Provide emergency response and repair of infrastructure systems -Facilities Engineering: -Conduct Management Process/Facility Installation Standard Audits -Provide risk management analysis and mitigation plans -Maintain infrastructure drawings/configuration management databases on a limited/minimum basis -Develop and document facility long range planning/programming -Provide consulting services, preliminary designs and engineering/rough order of magnitude estimates for required infrastructure builds/changes -Missile Defense Integration and Operations Center (MDIOC) Operating Expenses: -Lease General Services Administration (GSA) Vehicles and a commercial warehouse -Fund Schriever Air Force Base Support Costs (Defense Red Switch Network (DRSN) Support, Local Dial Tone, Long Distance, Cable TV, & Grounds Maintenance) -Facility Services: -Provide custodial services for over 675,000 square feet of floor space in Buildings 720/730 -Provide limited Copy Center and Shuttle Services for over 2,000 personnel -Provide In/Out Processing and Personnel Moves -Cable Plant/Cubicle/Workstation: -Install facility connectivity cabling; provide trouble shooting and repair on a critical basis			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Install and reconfigure furniture and workstations on a critical basis			
Title: Engineering and Event Services	10.569	8.526	7.809
Articles:	0	0	0

Description: See Description Below

FY 2011 Accomplishments:
-Mission Assurance and Event Execution Support:

-Implemented baseline technical control for all Missile Defense Integration and Operations Center (MDIOC) mission critical subsystems and services
-Executed MDIOC engineering management, quality assurance, configuration management and integration of all mission critical systems including:

-Technical power distribution, Uninterruptable Power Supply Systems, major transformer substations, and circuit protection
-Heating, Ventilation and Air Conditioning, chilled water and steam systems
-Secure and non-secure voice communications for Ballistic Missile Defense System (BMDS) Operations, major tests, and general constituencies
-Local and wide area secure data networking environments and network health and status tools 24 hours a day, 7 days a week, 365 days a year
-Ensured high availability and maintenance de-confliction of integrated MDIOC systems and BMDS Operations support 24 hours a day, 7 days a week, 365 days a year
-Implemented `last mile` integration for BMDS Operations, BMDS test, War gaming, exercise, training and general/admin services
-Executed comprehensive configuration baseline integrity freezes, periods of interest and work screening for all major tests and real world contingencies
-Coordinated process improvement investments across all mission areas
-Supported the initial relocation of Space Tracking and Surveillance System (STSS) program office personnel from Los Angeles Air Force Base to the Missile Defense Integration and Operations Center (MDIOC)
-Executed aggressive, proactive and tailored risk management to ensure integrity and persistent connectivity for all MDIOC missions including:

-Command, Control, Battle Management and Communications (C2MBC) incremental development and integration across the Integration Laboratory, Experimentation Laboratory (X-Lab), and the International Point of Presence

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Missile Defense Agency		**DATE:** February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013**
-Ballistic Missile Defense System (BMDS) focused, system and distributed ground testing and Hardware-in-the-Loop (HWIL) execution -Modeling and Simulation program management; Digital Simulation Architecture Development; Validation, Verification and Accreditation -BMDS flight tests including Flight Test Ground-Based Midcourse Defense (FTG) execution; Flight Test - Aegis (FTM) and Flight Test - THAAD (FTT) planning, coordination and situational awareness. (For system flight tests directed from the MDIOC, ensure the protection of power, Heating, Ventilation, and Air Conditioning, and communications critical to test execution and control). -Joint Target Operations Center (JTOC) Target of Opportunity (TOO) and target tracking, coordination and visualization -BMDS Operational Support Center and technical integration and implementation services 24 hours a day, 7 days a week, 365 days a year -MDA Intelligence Support Cell and Threat Modeling Center services -BMDS Wargame, exercise and DMETS training execution; Warfighter Support Center program integration -Missile Defense Space Development Center (MDSDC) Satellite Operations, Ground System and experiment support operations, and Space Tracking and Surveillance System (STSS) testing -Enterprise Sensor Laboratory experimental, networking and facility support and coordination -Ground-Based Midcourse Defense (GMD) Fire Control component-level operations, integration, testing, and training -Joint Early Warning Laboratory mission services and connectivity -Combatant Command (COCOM) operations work centers including the United States Northern Command (USNORTHCOM) Command, Control, Battle Management and Communications (C2BMC) Control Center (CCC), Army 100th Missile Defense Brigade, and United States Strategic Command`s Joint Functional Component Command-Integrated Missile Defense -MDA General Services Network and Operational Support Center and Network Communications Center -MDA Computer Emergency Response Team -Technical Watch Support: -Provided on-site technical environment for BMDS Watch Officers, Safety Officers, and Information Assurance Officers to execute their duties 24 hours a day, 7 days a week, 365 days a year -Implemented recall procedures to augment subject matter expertise availability during contingencies and major events -Executed tabletop exercises to asses readiness for COCOM Operational contingencies and major BMDS tests -Provided state change management and asset management technical support for the BMDS -Coordinated, reported and escalated critical information and BMDS test and operational event information to all MDIOC technical and management staff to ensure rapid break/fix actions are executed -Joint National Integration Center (JNIC) Research and Development Contract (JRDC) Business and Finance Operations -Provided overarching contract and financial management support for all Joint National Integration Center (JNIC) Research and Development Contract (JRDC) integrated programs/projects			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Provided engineering coordination, resource management, and event integration across all Missile Defense Integration and Operations Center (MDIOC) mission areas -Conducted continuous process improvement and implementation across all JRDC execution and MDIOC missions -Delivered integrated skill mix planning, coordination and workforce deployment across the dynamic spectrum of MDIOC events -Executed integrated resource forecasting and de-confliction -Performed project management for discrete enterprise enhancements -Event Architecture & Engineering Design: -Coordinated design and implementation of technical architectures for all major MDIOC hosted Ballistic Missile Defense System (BMDS) tests, training and operations -Delivered technical documentation packages for all major BMDS flight tests, ground tests, training and Combatant Command (COCOM) exercise support -Led requirements coordination and technical architecture enhancements for BMDS wargame, exercise and training networks -Updated BMDS end-to-end COCOM deployed architecture as-built documentation reflecting new incremental content and deployments -Maintained a technical repository of BMDS Implementation Architectures for real-time operations and configuration management *FY 2012 Plans:* -Mission Assurance and Event Execution Support -Implement baseline technical control for all MDIOC mission critical subsystems and services -Execute MDIOC engineering management, quality assurance, configuration management and integration of all mission critical systems including: -Technical power distribution, Uninterruptable Power Supply Systems, major transformer substations, and circuit protection -Heating, Ventilation and Air Conditioning, chilled water and steam systems -Secure and non-secure voice communications for BMDS Operations, major tests, and general constituencies -Local and wide area secure data networking environments and network health and status tools 24 hours a day, 7 days a week, 365 days a year -Ensure high availability of integrated MDIOC systems and BMDS Operations support 24 hours a day, 7 days a week, 365 days a year -Implement `last mile` integration for BMDS Operations, BMDS test, Wargaming, exercise, training and general/admin services -Execute comprehensive configuration baseline integrity freezes, periods of interest and work screening for all major tests and real world contingencies -Coordinate process improvement investments across all mission areas			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	**PROJECT** MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Support the completion of the relocation of the Space Tracking and Surveillance System (STSS) program office to the Missile Defense Integration and Operations Center (MDIOC). -Execute aggressive, proactive and tailored risk management to ensure integrity and persistent connectivity for all MDIOC missions including: -Command, Control, Battle Management and Communications (C2MBC) incremental development and integration across the Integration Laboratory, Experimentation Laboratory (X-Lab), and the International Point of Presence -Ballistic Missile Defense System (BMDS) focused, system and distributed ground testing and Hardware-in-the-Loop (HWIL) execution -Modeling and Simulation program management; Digital Simulation Architecture Development; Validation, Verification & Accreditation -BMDS flight tests including Flight Test Ground-Based Midcourse Defense (FTG) execution; Flight Test - Aegis (FTM) and Flight Test - THAAD (FTT) planning, coordination and situational awareness. (For system flight tests directed from the MDIOC, ensure the protection of power, Heating, Ventilation, and Air Conditioning, and communications critical to test execution and control). -Joint Target Operations Center (JTOC) Target of Opportunity (TOO) and target tracking, coordination and visualization -BMDS Operational Support Center and technical integration and implementation services 24 hours a day, 7 days a week, 365 days a year -MDA Intelligence Support Cell and Threat Modeling Center services -BMDS Wargame, exercise and DMETS training execution; Warfighter Support Center program integration -Missile Defense Space Experimentation Center (MDSEC) Satellite Operations, Ground System and experiment support operations, and Airborne Infrared Radar (ABIR), and Space Tracking and Surveillance System (STSS) testing -Enterprise Sensor Laboratory experimental, networking and facility support and coordination -Ground-Based Midcourse Defense (GMD) Fire Control component-level operations, integration, testing, and training -Joint Early Warning Laboratory mission services and connectivity -Combatant Command (COCOM) operations work centers including the United States Northern Command (USNORTHCOM), C2BMC, Control Center (CCC), Army 100th Missile Defense Brigade, and United States Strategic Command`s Joint Functional Component Command-Integrated Missile Defense -MDA General Services Network and Operational Support Center and Network Communications Center -MDA Computer Emergency Response Team Technical Watch Support: -Provide on-site technical environment for BMDS Watch Officers, Safety Officers, and Information Assurance Officers to execute their duties 8 hours a day, 5 days a week with a capability to surge to 24 hours a day, 7 days a week for contingency operations -Implement recall procedures to augment subject matter expertise availability during contingencies and major events			

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Missile Defense Agency		**DATE:** February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013**
-Execute tabletop exercises to asses readiness for Combatant Command (COCOM) Operational contingencies and major BMDS tests -Provide state change management and asset management technical support for the BMDS -Coordinate, report and escalate critical information and BMDS test and operational event information to all MDIOC technical and management staff to ensure rapid break/fix actions are executed -JNIC JRDC Business & Finance Operations -Provide overarching contract and financial management support for all Joint National Integration Center (JNIC) Research and Development Contract (JRDC) integrated programs/projects -Provide engineering coordination, resource management, and event integration across all Missile Defense Integration and Operations Center (MDIOC) mission areas -Conduct continuous process improvement and implementation across all JRDC execution and MDIOC missions -Deliver integrated skill mix planning, coordination and workforce deployment across the dynamic spectrum of MDIOC events -Execute integrated resource forecasting and de-confliction -Perform project management for discrete enterprise enhancements Event Architecture & Engineering Design -Coordinate design and implementation of technical architectures for all major MDIOC hosted Ballistic Missile Defense System (BMDS) tests, training and operations -Deliver technical documentation packages for all major BMDS flight tests, ground tests, training and Combatant Command (COCOM) exercise support -Lead requirements coordination and technical architecture enhancements for BMDS wargame, exercise and training networks -Update BMDS end-to-end COCOM deployed architecture as-built documentation reflecting new incremental content and deployments -Maintain a technical repository of BMDS Implementation Architectures for real-time operations and configuration management Event and Personnel Support: -Provide quality event planning, coordination, logistics, security access and host support for all MDIOC events and visitors -Deliver integrated service coordination for all MDIOC event and protocol support including: -Event Registration Web site -Offsite event registration -Security processing, including clearance verification and badging -Coordination of group lodgin -Arrangement/Coordination/Scheduling of Bus Transportation -Liaison between event Point of Contact (POC) and catering POC			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013**
-Reserve, setup, and coordinate access for all primary shared MDIOC conference rooms -Operate Audio Visual equipment during events -Prepare and conduct official ceremonies; coordinate and host Distinguished Visitor itineraries; obtain information disclosure approval; coordinate offsite dinners and socials ***FY 2013 Plans:*** -Mission Assurance and Event Execution Support -Implement baseline technical control for all Missile Defense Integration and Operations Center (MDIOC) mission critical subsystems and services -Execute MDIOC engineering management, quality assurance, configuration management and integration of all mission critical systems including: -Technical power distribution, Uninterruptable Power Supply Systems, major transformer substations, and circuit protection -Heating, Ventilation and Air Conditioning, chilled water and steam systems -Secure and non-secure voice communications for Ballistic Missile Defense Systems (BMDS) Operations, major tests, and general constituencies -Local and wide area secure data networking environments and network health and status tools 24 hours a day, 7 days a week, 365 days a year -Ensure high availability of integrated MDIOC systems and BMDS Operations support 24 hours a day, 7 days a week, 365 days a year -Implement `last mile` integration for BMDS Operations, BMDS test, War gaming, exercise, training and general/admin services -Execute comprehensive configuration baseline integrity freezes, periods of interest and work screening for all major tests and real world contingencies -Coordinate process improvement investments across all mission areas -Execute aggressive, proactive and tailored risk management to ensure integrity and persistent connectivity for all MDIOC missions including: -Command, Control, Battle Management and Communications (C2MBC) incremental development and integration across the Integration Laboratory, Experimentation Laboratory (X-Lab), and the International Point of Presence -BMDS focused, system and distributed ground testing and Hardware-in-the-Loop (HWIL) execution -Modeling and Simulation program management; Digital Simulation Architecture Development; Validation, Verification and Accreditation			

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| APPROPRIATION/BUDGET ACTIVITY
0400: *Research, Development, Test & Evaluation, Defense-Wide*
BA 4: *Advanced Component Development & Prototypes (ACD&P)* | R-1 ITEM NOMENCLATURE
PE 0603904C: *Missile Defense Integration &*
Operations Center (MDIOC) | PROJECT
MD22: *Missile Defense Integration and*
Operations Center (MDIOC) |

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-BMDS flight tests including Flight Test Ground-Based Midcourse Defense (FTG) execution; Flight Test - Aegis (FTM) and Flight Test - THAAD (FTT) planning, coordination and situational awareness. (For system flight tests directed from the MDIOC, ensure the protection of power, Heating, Ventilation and Air Conditioning, and communications critical to test execution and control). -Joint Target Operations Center (JTOC) Target of Opportunity (TOO) and target tracking, coordination and visualization -BMDS Operational Support Center and technical integration and implementation services 24 hours a day, 7 days a week, 365 days a year -MDA Intelligence Support Cell and Threat Modeling Center services -BMDS Wargame, exercise and DMETS training execution; Warfighter Support Center program integration -Missile Defense Space Development Center (MDSDC) Satellite Operations, Ground System and experiment support operations, and Space Tracking and Surveillance System (STSS) testing -Enterprise Sensor Laboratory experimental, networking and facility support and coordination -Ground-Based Midcourse Defense (GMD) Fire Control component-level operations, integration, testing, and training -Joint Early Warning Laboratory mission services and connectivity -Combatant Command (COCOM) operations work centers including the United States Northern Command (USNORTHCOM) Command, Control, Battle Management and Communications (C2BMC) Control Center (CCC), Army 100th Missile Defense Brigade, and United States Strategic Command`s Joint Functional Component Command-Integrated Missile Defense -MDA General Services Network and Operational Support Center and Network Communications Center -MDA Computer Emergency Response Team -Technical Watch Support -Provide on-site technical environment for Ballistic Missile Defense System (BMDS) Watch Officers, Safety Officers, and Information Assurance Officers to execute their duties 8 hours a day, 5 days a week with a capability to surge to 24 hours a day, 7 days a week for contingency operations -Implement recall procedures to augment subject matter expertise availability during contingencies and major events -Execute tabletop exercises to asses readiness for COCOM Operational contingencies and major BMDS tests -Provide state change management and asset management technical support for the BMDS -Coordinate, report and escalate critical information and BMDS test and operational event information to all Missile Defense Integration and Operations Center (MDIOC) technical and management staff to ensure rapid break/fix actions are executed -Joint National Integration Center (JNIC) Research and Development Contract (JRDC) Business and Finance Operations -Provide overarching contract and financial management support for all JNIC JRDC integrated programs/projects -Provide engineering coordination, resource management, and event integration across all MDIOC mission areas -Conduct continuous process improvement and implementation across all JRDC execution and MDIOC missions -Deliver integrated skill mix planning, coordination and workforce deployment across the dynamic spectrum of MDIOC events			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013**
-Execute integrated resource forecasting and de-confliction -Perform project management for discrete enterprise enhancements -Event Architecture & Engineering Design: -Coordinate design and implementation of technical architectures for all major MDIOC hosted BMDS tests, training and operations -Deliver technical documentation packages for all major BMDS flight tests, ground tests, training and COCOM exercise support -Lead requirements coordination and technical architecture enhancements for Ballistic Missile Defense System (BMDS) wargame, exercise and training networks -Update BMDS end-to-end Combatant Command (COCOM) deployed architecture as-built documentation reflecting new incremental content and deployments -Maintain a technical repository of BMDS Implementation Architectures for real-time operations and configuration management			
Title: Operations and Sustainment **Articles:**	6.246 0	6.038 0	6.234 0
Description: See Description Below ***FY 2011 Accomplishments:*** -Government Civilian, Contract Support Services (CSS), Training, Travel, Federally Funded Research and Development Centers (FFRDC) -Funded Civilian, Contract Support Services (CSS) and Contract positions supporting operations and sustainment of all Missile Defense Integration Operations Center activities contributing to the mission execution platform -Provided quality event planning, coordination, logistics, security access and host support for all MDIOC events and visitors -Delivered integrated service coordination for all MDIOC event and protocol support including: -Event Registration Website -Offsite event registration -Security processing, including clearance verification and badging -Coordination of group lodging -Arrangement/Coordination/Scheduling of bus transportation -Liaison between event Point of Contact (POC) and catering POC -Reserved, setup, and coordinated access for all primary shared MDIOC conference rooms -Operated Audio Visual equipment during events			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Prepared and conducted official ceremonies; coordinated and host Distinguished Visitor itineraries; obtain information disclosure approval; coordinated offsite dinners and socials -Developed and Coordinated Cross-Domain Solution architectures for high priority BMDS testing and contingency deployments -Coordinated MDA leveraged involvement in multi-mission integration opportunities sponsored by external agencies and customers -Funded Training and Travel ***FY 2012 Plans:*** -Government Civilian, Contract Support Services (CSS), Training, Travel, Federally Funded Research and Development Centers (FFRDC) -Fund Civilian, Contract Support Services (CSS) and Federally Funded Research and Development Centers (FFRDC) positions supporting operations and sustainment of all MDIOC activities contributing to the mission execution platform -Fund Training and Travel -Defense Efficiency - Contractor Staff Support. As part of the Department of Defense reform agenda, reduces funds below the aggregate level reported in FY 2010 for controls that augment staff functions. ($1.202 thousands) ***FY 2013 Plans:*** -Government Civilian, CSS, Training, Travel, FFRDC -Fund Civilian, CSS and FFRDC positions supporting operations and sustainment of all Missile Defense Integration and Operations Center (MDIOC) activities contributing to the mission execution platform -Provide quality event planning, coordination, logistics, security access and host support for all MDIOC events and visitors -Deliver integrated service coordination for all MDIOC event and protocol support including: -Event Registration Web site -Offsite event registration -Security processing, including clearance verification and badging -Coordination of group lodging -Arrangement/Coordination/Scheduling of bus transportation -Liaison between event Point of Contact (POC) and catering POC -Reserve, setup, and coordinate access for all primary shared MDIOC conference rooms -Operate Audio Visual equipment during events -Prepare and conduct official ceremonies; coordinate and host Distinguished Visitor itineraries; obtain information disclosure approval; coordinate offsite dinners and socials			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Develop and coordinate Cross-Domain Solution architectures for high priority Ballistic Missile Defense System (BMDS) testing and contingency deployments -Coordinate MDA leveraged involvement in multi-mission integration opportunities sponsored by external agencies and customers -Fund Training and Travel			
Title: C2BMC Test Beds *Articles:*	20.332 0	- 0	- 0
Description: See Description Below *FY 2011 Accomplishments:* The BMDS performance evaluation strategy is to develop models and simulations of the BMDS and compare their predictions to empirical data collected through comprehensive flight and ground testing to validate their accuracy, rather than physically testing all possible combinations of Ballistic Missile Defense System (BMDS) configurations, engagement conditions, and target phenomena. The BMDS test review determined how to validate our models and simulations so that our war fighting commanders consider employing the BMDS in ways other than originally planned or against threats unknown at this time. -Completed the transition the Missile Defense Integration and Operations Center (MDIOC) Command, Control, Battle Management and Communications (C2BMC) Testbed to support sustainment testing of C2BMC Spiral 6.4 -Started the C2BMC Testbed Test Environment transition to C2BMC Spiral 8.2 -Planned, collected data, assessed, examined, and reported on MDA directed C2BMC spiral integration testing -Supported continuing integration of missile defense elements into the BMDS command and control structure -Supported interoperability and integration of the BMDS program elements -Improved the operational realism of the system test architectures -Conducted a system test campaign across the architecture based on the Integrated Master Plan Test (IMPT) Schedule -Supported the field testing of the European Deployment -Sustained the C2BMC Components of the Distributed Multi-Echelon Distributed Training system (DMETS) in the conduct of BMDS-level wargames, exercises, and training -Provided infrastructure, network, and troubleshooting support to: -C2BMC Control Center (CCC) -System Test and Operations Center (STOC) -BMDS Communications Network (BCN) -Parallel Staging Network (PSN) -BMDS Network Operations and Security Center (BNOSC)			

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APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	**PROJECT** MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Conducted C2BMC Experimentation Laboratory (X-Lab) Events and Experimentation -Refined Command, C2BMC interfaces to BMDS Elements and Sensors -Completed BMD Overhead Persistent Infrared (OPIR) Architecture (BOA) performance assessments, integration, and testing ***FY 2012 Plans:*** Plans captured in Project MD01, PE 0603896C beginning FY 2012 ***FY 2013 Plans:*** NA			
Title: Joint Early Warning Laboratory (JEWL) ***Articles:***	2.043 0	- 0	- 0
Description: See Description Below ***FY 2011 Accomplishments:*** As the USSTRATCOM designated facility for testing all changes or additions to the Theater Event System (TES) architecture, the Joint Early Warning Lab (JEWL) replicates all known theater Early Warning (EW) architecture and maintains a replay capability for fault isolation, anomaly identification, and can modify data to isolate anomalies. The JEWL provides timely analysis and comparisons of the legacy EW and BMD systems. -Performed Ballistic Missile Defense System (BMDS) Early Warning test, integration and fielding support -Performed Joint Early Warning operational assessments and support -Recorded data on all missile events broadcast over Theater Event System (TES) -Maintained database on all missile events recorded since January 2003 -Performed analysis pertaining to live events -Supported testing and integration of Theater Missile Warning (TMW) and Integrated Air Missile Defense (IAMD) architecture improvements -Performed United States Strategic Command (USSTRATCOM) Configuration Control Board (CCB) assessments and technical evaluations of new systems for inclusion in Theater Missile Warning (TMW) Architecture -Conducted TMW Health Checks to assist Combatant Command (COCOMs) in evaluating their missile warning architecture, and optimize their early warning coverage in conjunction with USSTRATCOM -Supported the Global Command and Control System (GCCS) Theater Air and Missile Defense (TAMD) workgroup and sustainment of TMW capabilities in Global Command and Control System (GCCS) -Maintained web-based documentation of Combatant Command (COCOM) Tier-1 TMW equipment configuration -Provided subject-matter expertise in support of BMDS and TMW architecture convergence			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Performed testing on new systems for inclusion into the Theater Missile Warning (TMW) architecture -Performed Early Warning Target of Opportunity (TOO) initial quick reports and comparative analysis -Performed Operational Early Warning Anomaly Tracking and Analysis -Provided BMDS Command, Control, Battle Management and Communications (C2BMC) Early Warning Integration support -Performed Operator/Warfighter Theater Missile Warning (TMW) Exercise Data Analysis -Provided and chair USSTRATCOM CCB Engineering Subgroup -Established the Early Warning Incident / Anomaly tracking database in support of the TMW CCB and BMDS Early Warning Special Product Team (EW SPT) reporting and metrics tracking -Upgraded Joint Early Warning Laboratory (JEWL) hardware/software/communications -Provided Command, Control, Battle Management and Communications (C2BMC) display analysis for inclusion in the BMDS Integrated Tactical Warning/Attack Assessment (ITWAA) Theater Event System (TES) Comparison Reports -Continued to provide Early Warning-Special Product Team (EW-SPT) missile warning technical expertise for the COCOM Warfighters *FY 2012 Plans:* Plans captured in Project MD01, PE 0603896C beginning FY 2012 *FY 2013 Plans:* NA			
Title: Modeling & Simulation Systems Engineering and Integration ***Articles:***	1.639 0	1.686 0	1.621 0
Description: See Description Below *FY 2011 Accomplishments:* Conducted alternative concepts, technical Feasibility Analysis, and preliminary trade studies. These included concept definition for a remote infrared sensor and technical assessment of unique high-performance design options for Standard Missile 3 Block IIB (SM-3 Block IIB). Provided analysis support to the Chief Architect (Architecture Trade Studies, Initiatives by Office of the Secretary of Defense (OSD), Joint Chiefs of Staff (JCS), Combatant Command (COCOMs), Special Programs and other Special Studies. -Continued planning and coordination for real-time track demonstrations using an Unmanned Aerial Vehicle (UAV) (associated with scheduled BMDS test events) using an existing airborne platform -Started design work on high-performance design options for SM-3 Block IIB			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
-Continued to support assigned Office of the Secretary of Defense (OSD), Joint Chiefs of Staff (JCS), Combatant Command (COCOMs) and other special studies *FY 2012 Plans:* Conduct alternative concepts, technical Feasibility Analysis, and preliminary trade studies. This includes technical assessment of unique high-performance design options for SM-3 Block IIB. Provide analysis support to the Chief Architect (Architecture Trade Studies, Initiatives by Office of the Secretary of Defense (OSD), Joint Chiefs of Staff (JCS), Combatant Command (COCOMs), Special Programs, and other Special Studies. -Continue design work on high-performance design options for SM-3 Block IIB -Support pre-mission analysis involving Space Tracking and Surveillance System (STSS) with Aegis testing -Continue to support assigned Office of the Secretary of Defense (OSD), Joint Chiefs of Staff (JCS), Combatant Command (COCOMs) and other special studies *FY 2013 Plans:* Conduct alternative concepts, technical Feasibility Analysis, and preliminary trade studies. This includes technical assessment of unique high-performance design options for SM-3 Block IIB. Provide analysis support to the Chief Architect (Architecture Trade Studies, Initiatives by Office of the Secretary of Defense (OSD), Joint Chiefs of Staff (JCS), Combatant Command (COCOMs), Special Programs, and other Special Studies. -Continue design work on high-performance design options for SM-3 Block IIB -Support pre-mission analysis involving Space Tracking and Surveillance System (STSS) with Aegis testing -Continue to support assigned Office of the Secretary of Defense (OSD), Joint Chiefs of Staff (JCS), Combatant Command (COCOMs) and other special studies			
Title: IT Infrastructure Recapitalization *Articles:*	- 0	10.000 0	- 0
Description: See Description Below *FY 2011 Accomplishments:* N/A *FY 2012 Plans:*			

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Missile Defense Agency		**DATE:** February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2011**	**FY 2012**	**FY 2013**
-Invest $10 million in IT Recapitalization to include desk tops, laptops, thin clients, servers, routers, and switches. Approximately ten percent of the 12,850 desktop computers, laptops, and thin client devices within the Missile Defense Agency are older than five years compared to an industry refresh standard of three years. *FY 2013 Plans:* N/A			
Accomplishments/Planned Programs Subtotals	80.116	66.408	59.842

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• 0603175C: *Ballistic Missile Defense Technology*	92.617	74.920	79.975		79.975	81.388	115.427	133.742	136.654	Continuing	Continuing
• 0603274C: *Special Program - MDA Technology*	0.000	61.371	36.685		36.685	39.736	42.726	46.310	47.213	Continuing	Continuing
• 0603881C: *Ballistic Missile Defense Terminal Defense Segment*	420.839	290.076	316.929		316.929	313.212	338.353	249.475	279.758	Continuing	Continuing
• 0603882C: *Ballistic Missile Defense Midcourse Defense Segment*	1,245.489	1,159.456	903.172		903.172	914.603	954.069	948.650	862.884	Continuing	Continuing
• 0603884C: *Ballistic Missile Defense Sensors*	389.259	222.075	347.012		347.012	327.342	362.520	341.780	326.095	Continuing	Continuing
• 0603888C: *Ballistic Missile Defense Test & Targets*	999.068	85.569	0.000		0.000	0.000	0.000	0.000	0.000	0.000	1,084.637
• 0603890C: *BMD Enabling Programs*	401.113	415.048	362.711		362.711	339.197	373.346	395.350	394.085	Continuing	Continuing
• 0603891C: *Special Programs - MDA*	228.450	296.145	272.387		272.387	321.450	345.263	354.503	348.602	Continuing	Continuing
• 0603892C: *AEGIS BMD*	1,530.767	988.928	992.407		992.407	960.870	950.097	1,030.201	958.680	Continuing	Continuing
• 0603893C: *Space Tracking & Surveillance System*	105.580	96.232	51.313		51.313	45.355	32.423	34.195	35.087	Continuing	Continuing
• 0603895C: *Ballistic Missile Defense System Space Programs*	10.569	7.940	6.912		6.912	6.576	6.610	7.219	7.371	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• 0603896C: *Ballistic Missile Defense Command and Control, Battle Management & Communication*	454.440	363.640	366.552		366.552	376.116	383.055	358.431	364.725	Continuing	Continuing
• 0603898C: *Ballistic Missile Defense Joint Warfighter Support*	55.351	41.174	55.550		55.550	53.139	53.718	59.291	60.540	Continuing	Continuing
• 0603901C: *Directed Energy Research*	126.096	49.943	46.944		46.944	47.865	47.357	52.519	54.513	Continuing	Continuing
• 0603902C: *Next Generation Aegis Missile (Standard Missile-3 Block IIB (SM-3 IIB))*	0.000	13.443	224.077		224.077	295.248	455.373	508.356	430.239	Continuing	Continuing
• 0603906C: *Regarding Trench*	7.520	15.775	11.371		11.371	10.369	5.050	1.769	1.809	Continuing	Continuing
• 0603907C: *Sea Based X-Band Radar (SBX)*	151.032	176.831	9.730		9.730	9.725	9.739	9.725	9.728	Continuing	Continuing
• 0603913C: *Israeli Cooperative Programs*	209.048	235.700	99.836		99.836	95.782	96.803	103.940	106.020	Continuing	Continuing
• 0604880C: *Land Based SM-3 (LBSM3)*	286.142	306.185	276.338		276.338	127.235	113.677	47.718	56.193	Continuing	Continuing
• 0604881C: *AEGIS SM-3 Block IIA Co-Development*	299.767	473.843	420.630		420.630	273.926	200.699	185.007	46.103	Continuing	Continuing
• 0604883C: *Precision Tracking Space System*	36.693	80.723	297.375		297.375	267.505	285.529	326.073	354.190	Continuing	Continuing
• 0901585C: *Pentagon Reservation*	20.378	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	20.378
• 0901598C: *Management HQ - MDA*	28.472	28.908	34.855		34.855	25.473	30.838	31.482	32.798	Continuing	Continuing

D. Acquisition Strategy

The Joint National Integration Center Research and Development Contract is the major performing integrated contract that is competed periodically.

The acquisition strategy for Missile Defense Integration and Operation Center (MDIOC) mission execution is to employ a contract to perform designated integration and sustainment tasks to conduct Ballistic Missile Defense System (BMDS) Research, Development, Test and Evaluation (RDT&E). The MDIOC is operated by missile

Exhibit R-2A, RDT&E Project Justification: PB 2013 Missile Defense Agency		DATE: February 2012
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defense subject matter experts (SME) composed of Government military and civilian personnel, Federally Funded Research and Development Center (FFRDC), MDIOC Technical Advisory and Assistance Services, and major defense contractors.

E. Performance Metrics
  N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Missile Defense Agency												DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*					**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*						**PROJECT** MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*		

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-	0.000	0.000	0.000

Remarks
  N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Infrastructure Systems and Support MDIOC NG	C/CPAF	MDIOC/Northrop Grumman Mission Systems:Colorado Springs, CO	37.586	21.102	Nov 2011	25.595	Nov 2012	-		25.595	Continuing	Continuing	Continuing
Facilities and Maintenance MDIOC NG	C/CPAF	MDIOC/Northrop Grumman Mission Systems:Colorado Springs, CO	30.509	15.614	Nov 2011	15.047	Nov 2012	-		15.047	Continuing	Continuing	Continuing
Facilities and Maintenance MDIOC GSA / Leases / Calibration	MIPR	Various (GSA, 50th Space Wing, Warehouses):Colorado Springs, CO	2.034	1.182	Dec 2011	1.198	Dec 2012	-		1.198	2.754	7.168	0.000
Facilities and Maintenance MDIOC Utilities	MIPR	50th Space Wing:Schriever AFB, CO	4.274	2.260	Oct 2011	2.338	Oct 2012	-		2.338	Continuing	Continuing	Continuing
Engineering and Event Services MDIOC NG	C/CPAF	MDIOC/Northrop Grumman Mission Systems:Colorado Springs, CO	23.513	8.526	Oct 2011	7.809	Oct 2012	-		7.809	Continuing	Continuing	Continuing
Operations and Sustainment Operations & Sustainment	Allot	MDIOC:Colorado Springs, CO	6.667	3.076	Oct 2011	3.218	Oct 2012	-		3.218	Continuing	Continuing	Continuing
Operations and Sustainment CSS/A&AS	C/FFP	SRS/ManTech/ MiDAESS Multi:Colorado Springs, CO	5.639	2.463	Oct 2011	2.494	Oct 2012	-		2.494	6.502	17.098	0.000

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency												**DATE:** February 2012	

APPROPRIATION/BUDGET ACTIVITY
0400: *Research, Development, Test & Evaluation, Defense-Wide*
BA 4: *Advanced Component Development & Prototypes (ACD&P)*

R-1 ITEM NOMENCLATURE
PE 0603904C: *Missile Defense Integration & Operations Center (MDIOC)*

PROJECT
MD22: *Missile Defense Integration and Operations Center (MDIOC)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Operations and Sustainment FFRDC	FFRDC	MDIOC:Colorado Springs, CO	1.053	0.371	Oct 2011	0.383	Oct 2012	-		0.383	1.098	2.905	0.000
Operations and Sustainment Travel and Training	Allot	MDIOC:Colorado Springs, CO	0.268	0.128	Oct 2011	0.139	Oct 2012	-		0.139	0.323	0.858	0.000
Modeling & Simulation Systems Engineering and Integration BMDS Architecture	C/CPAF	MDIOC/Northrop Grumman Mission Systems:Colorado Springs, CO	2.820	1.686	Oct 2011	1.621	Oct 2012	-		1.621	3.537	9.664	0.000
IT Infrastructure Recapitalization Information Technology	C/CPAF	MDIOC/Northrop Grumman Mission Systems/:Colorado Springs, CO	-	10.000	Jan 2012	-		-		-	Continuing	Continuing	Continuing
Subtotal			114.363	66.408		59.842		-		59.842			

Remarks

Funds for utilities and base communications or specified in the Inter-service Support Agreement with the 50th Space Wing. In addition, the Missile Defense Integration and Operations Center (MDIOC) provides Federally Funded Research and Development Center (FFRDC) and Technical Advisory and Assistance Services employees, for MDIOC operations and oversight of the Joint Research and Development Contractor (JRDC), as well as funding for JRDC work as required by the government.

FY 2012 IT Infrastructure Recapitalization did not exist in FY 2010 and FY 2011; Invest $10 million in IT Recapitalization to include desk tops, laptops, thin clients, servers, routers, and switches. Approximately ten percent of the 12,850 desktop computers, laptops, and thin client devices within the Missile Defense Agency are older than five years compared to an industry refresh standard of three years. Continuing to extend refresh rates is increasing the risk for downtime and increased labor requirements to sustain obsolete systems.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
C2BMC Test Beds C2BMC Testbed - 1	C/FFP	Mantech/ MiDAESS:Colorado Springs, CO	3.102	-		-		-		-	Continuing	Continuing	Continuing
C2BMC Test Beds C2BMC Testbed - 2	FFRDC	IDA:Colorado Springs, CO	1.670	-		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Missile Defense Agency		DATE: February 2012
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
C2BMC Test Beds BMDS Level Testing	C/CPAF	Northrop Grumman Mission Systems:Colorado Springs, CO	35.407	-	-	-	-	-	-	-	Continuing	Continuing	Continuing
Joint Early Warning Laboratory (JEWL) JEWL	C/CPAF	MULTI:Colorado Springs, CO	4.192	-	-	-	-	-	-	-	Continuing	Continuing	Continuing
		Subtotal	44.371	-		-		-		-			

Remarks
FY 2012 Plans captured in Project MD01, PE 0603896C

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

Remarks
N/A

	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	158.734	66.408	59.842	-	59.842			

Remarks
NA

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Missile Defense Agency		**DATE:** February 2012
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Exhibit R-4, **RDT&E Schedule Profile:** PB 2013 Missile Defense Agency		**DATE:** February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration & Operations Center (MDIOC)*	**PROJECT** MD22: *Missile Defense Integration and Operations Center (MDIOC)*

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Missile Defense Agency		DATE: February 2012
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Exhibit R-4, **RDT&E Schedule Profile:** PB 2013 Missile Defense Agency		**DATE:** February 2012
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Exhibit R-4, **RDT&E Schedule Profile:** PB 2013 Missile Defense Agency		**DATE:** February 2012
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Exhibit R-4A, **RDT&E Schedule Details:** PB 2013 Missile Defense Agency | **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	PROJECT MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Recapitalization AF Tenant Space 1201 Ph 2	1	2011	1	2011
Electrical Power Distribution Upgrade Phase II Design	1	2011	2	2011
Electrical Power Distribution Upgrade Phase II Implementation	1	2012	2	2012
Electrical Power Distribution Upgrade Phase III Design	1	2013	2	2013
Design, procure, and implement additional data storage capacity	2	2014	3	2014
Electrical Power Distribution Upgrade Phase III Implementation	3	2013	4	2013
Replace Roof, Building 730	1	2011	1	2011
Emergency Lighting System Replacement	3	2013	4	2013
Electrical Power Distribution Upgrade Phase IV Design	1	2014	2	2014
Electrical Power Distribution Upgrade Phase IV Implementation	1	2015	2	2015
Install Restricted Area Access Telephone System	3	2014	4	2014
Electrical Power Distribution Upgrade Phase V Design	1	2015	2	2015
Electrical Power Distribution Upgrade Phase V Implementation	3	2015	4	2015
Replace Elevators	2	2015	3	2015
Replace building exterior panel sealant PhI	3	2012	4	2012
Replace building exterior panel sealant Phase II and Phase III	2	2013	3	2013
Replace building exterior panel sealant Phase IV and V	2	2014	3	2014
System Test (ST) (C2BMC Suite for Ground Test) - 1 Spiral 6.4 Upgrade Q1-Q3	1	2011	4	2011
Ground Test Spiral 6.4 BMD Overhead Persistent IR (BOA) Node Q1	1	2011	1	2011
Vigilant Shield 11	1	2011	1	2011
Vigilant Shield 12	1	2012	1	2012
Vigilant Shield 13	1	2013	1	2013

Exhibit R-4A, **RDT&E Schedule Details:** PB 2013 Missile Defense Agency | **DATE:** February 2012

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Events	Start		End	
	Quarter	Year	Quarter	Year
Vigilant Shield 14	1	2014	1	2014
Vigilant Shield 15	1	2015	1	2015
Global Defender Ex06	3	2015	3	2015
Keen Edge Q2	2	2012	2	2012
Nimble Titan	2	2011	2	2011
Nimble Titan Q3	3	2012	3	2012
Terminal Fury 11	3	2011	3	2011
Terminal Fury 12	3	2012	3	2012
Terminal Fury 13	3	2013	3	2013
Terminal Fury 14	3	2014	3	2014
Terminal Fury 15	3	2015	3	2015
Eagle Resolve 12	3	2012	3	2012
Assured Response 04X Q1 FY11	1	2011	1	2011
Assured Response 04d	2	2011	2	2011
Assured Response 06a	4	2015	4	2015
Global Thunder 11	1	2011	1	2011
Global Thunder 12	1	2012	1	2012
Global Thunder 13	1	2013	1	2013
Global Thunder 14	2	2014	2	2014
Global Thunder 15	1	2015	1	2015
Global Thunder 16	2	2016	2	2016
BMDS Wargame 12	3	2012	3	2012
Global Lightening 11	3	2011	3	2011
Global Lightening 12	3	2012	3	2012
Global Lightening 13	3	2013	3	2013

Exhibit R-4A, **RDT&E Schedule Details:** PB 2013 Missile Defense Agency | **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration & Operations Center (MDIOC)*	**PROJECT** MD22: *Missile Defense Integration and Operations Center (MDIOC)*

Events	Start		End	
	Quarter	Year	Quarter	Year
Global Lightening 14	3	2014	3	2014
Global Lightening 15	2	2015	2	2015
Global Defender Ex 04	4	2012	4	2012
GTD-04b (System Ground Test)	2	2011	2	2011
GTI-04d (System Ground Test)	3	2011	3	2011
TA-04 Technical Assessment 04	4	2011	4	2011
GTX-04e (System Ground Test)	2	2012	2	2012
GTI-04e (VV&A) (System Ground Test)	1	2013	1	2013
GTX-07a (System Ground Test)	3	2016	3	2016
GTX-07b (System Ground Test)	4	2016	4	2016
GTD-04e (VV&A) (System Ground Test)	4	2013	4	2013
GTI-04e (DT (System Ground Test)	3	2013	3	2013
GTI-04e (OT) (System Ground Test)	4	2013	4	2013
PA-04 Performance Assessment 04	3	2013	3	2013
GTD-04e (DT) (System Ground Test)	4	2013	4	2013
GTD-04e (OT) (System Ground Test)	4	2013	4	2013
GTX-06a Focused Regional Ground Test Event	4	2013	4	2013
Warfighter TP 04 Warfighter Trial Period 04 (System Ground Test)	1	2014	1	2014
GTX-06b (Focused Strategic Ground Test)	2	2014	2	2014
GTI-06 (VV&A) (Full BMDS HWIL Test) (System Ground Test)	4	2014	4	2014
GTD-06 (VV&A) (System Ground Test)	4	2015	4	2015
GTI-06 (DT) (Full BMDS HWIL Event) (System Ground Test)	2	2015	2	2015
GTI-06 (OT) (System Ground Test)	3	2015	3	2015
GTD-06 (DT) (System Ground Test)	4	2015	4	2015
GTD-06 (OT) (System Ground Test)	4	2015	4	2015

Exhibit R-4A, **RDT&E Schedule Details:** PB 2013 Missile Defense Agency | **DATE:** February 2012

| **APPROPRIATION/BUDGET ACTIVITY**
0400: *Research, Development, Test & Evaluation, Defense-Wide*
BA 4: *Advanced Component Development & Prototypes (ACD&P)* | **R-1 ITEM NOMENCLATURE**
PE 0603904C: *Missile Defense Integration &*
Operations Center (MDIOC) | **PROJECT**
MD22: *Missile Defense Integration and*
Operations Center (MDIOC) |

Events	Start		End	
	Quarter	Year	Quarter	Year
PA-06 Performance Assessment 06	4	2015	4	2015
Warfighter TP 06 (System Ground Test)	2	2016	2	2016
FTG-06a (GM Intercept Test Flight)	1	2011	1	2011
JFTM-04 E1, E2, E3 (Aegis Simulated Intercept Flight Test)	1	2011	1	2011
USFT-4 (Arrow Intercept Test Flight)	1	2011	1	2011
Blue Sparrow-2 (Arrow Flight Test)	3	2011	3	2011
FTM-16 (Aegis Flight Test) E1(Simulated Intercept), E2 (Intercept)	4	2011	4	2011
FTP-04 (PATRIOT Flight Test)	2	2011	2	2011
FTX-11 (USAF Glory Trip 203 Flight Test)	4	2011	4	2011
FTX-17 (Air Launched Target Return to Flight - Flight Test)	3	2011	3	2011
FTM-15 (Aegis Flight Test)	3	2011	3	2011
FTT-12 (THAAD Intercept Flight Test)	4	2011	4	2011
AST-14 (Israeli Cooperative Intercept Flight Test)	2	2013	2	2013
FTM-19 E2 (Aegis Intercept Flight Test)	4	2012	4	2012
FTM-20 E2 (Aegis Intercept Flight Test)	1	2015	1	2015
FTG-08 (GMD Intercept Flight Test)	3	2014	3	2014
FTM-22 E2 (Aegis Intercept Flight Test)	3	2013	3	2013
FTM-26 (Aegis Intercept Flight Test)	3	2016	3	2016
FTT-11a (THAAD Flight Test)	4	2014	4	2014
FTO-01 (Aegis/THAAD/Patriot Multiple Engagement Flight Test)	3	2013	3	2013
FTM-21 E1 (Aegis Flight Test) E1 (Simulated Intercept), E2 (Simulated Intercept), E3 (Intercept)	3	2013	3	2013
FTX-10 (Cobra Dane Tracking Test)	3	2015	3	2015
FTT-15 (THAAD Intercept Flight Test)	2	2017	2	2017
AST-15 (Israeli Cooperative Intercept Flight Test)	1	2014	1	2014
FTM-19 E1 (Aegis Simulated Intercept Flight Test)	3	2013	3	2013

Exhibit R-4A, **RDT&E Schedule Details:** PB 2013 Missile Defense Agency | **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	PROJECT MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

Events	Start		End	
	Quarter	Year	Quarter	Year
AACTV-01 E1, E2 (Aegis Ashore Flight Test)	2	2014	2	2014
AST-17 (Israeli Cooperative Intercept Flight Test)	1	2016	1	2016
AST-18 (Israeli Cooperative Intercept Flight Test)	4	2016	4	2016
FTG-06b (GM Intercept Flight Test)	4	2012	4	2012
FTG-13 (GM Intercept Flight Test)	4	2016	4	2016
FTG-15 (GM Intercept Flight Test)	4	2017	4	2017
FTG-17 (GM Intercept Flight Test)	4	2017	4	2017
FTM-16 E2a (Simulated Intercept Flight Test)	3	2012	3	2012
FTM-18 (Aegis Intercept Flight Test)	3	2012	3	2012
FTM-20 E2 (Aegis Simulated Intercept Flight Test)	1	2015	1	2015
FTM-30 (Aegis Intercept Flight Test)	3	2015	3	2015
FTP-06 (Patriot Flight Test)	4	2012	4	2012
FTP-07 (Patriot Flight Test)	4	2012	4	2012
FTP-08 (Patriot Flight Test)	4	2013	4	2013
FTX-19 (Aegis Simulated Endo-Engagement)	1	2015	1	2015
FTX-20 (Aegis Simulated Engagement)	1	2017	1	2017
FTM-20 E1 (Aegis Simulated Intercept Flight Test)	3	2014	3	2014
DMETS Training Event Upgrades Q1 FY11	1	2011	1	2011
DMETS Spiral 6.4 Global Engagement Manager (GEM) #2 Q1 FY11	1	2011	1	2011
Spiral 6.4C2 Testing FY11 Q1 - Q2	1	2011	2	2011
FTX-14 (Aegis Simulated Intercept Flight Test)	1	2014	1	2014
SCDPTV-1 (Aegis Flight Test)	1	2014	1	2014
AST-16 (Israeli Cooperative Intercept Flight Test)	1	2015	1	2015
SCDCTV-1 (Aegis Flight Test)	2	2015	2	2015
AAFTM-01 E1 (Aegis Ashore Intercept Flight Test)	4	2014	4	2014

Exhibit R-4A, **RDT&E Schedule Details:** PB 2013 Missile Defense Agency | **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	PROJECT MD22: *Missile Defense Integration and* *Operations Center (MDIOC)*

Events	Start		End	
	Quarter	Year	Quarter	Year
AAFTM-02 (Aegis Ashore Intercept Flight Test)	4	2014	4	2014
SCDCTV-2 (Aegis Flight Test)	4	2015	4	2015
FTM-24 E1 (Aegis Intercept Flight Test)	4	2014	4	2014
FTM-25 E1, E2 (Aegis Intercept Test Flight)	1	2015	1	2015
SFTM-1 (Aegis Flight Test) E1(Simulated Intercept), E2 (Intercept)	3	2016	3	2016
SFTM-2 (Aegis Flight Test) E2 (Intercept)	1	2017	1	2017
FTO-02 (Aegis/THAAD/Patriot Multiple Engagement Flight Test)	4	2015	4	2015

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Missile Defense Agency		**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration & Operations Center (MDIOC)*	**PROJECT** MD40: *Program-Wide Support*

COST ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
MD40: *Program-Wide Support*	2.996	2.841	3.201	-	3.201	2.741	2.707	2.700	2.835	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

Note
  N/A

A. Mission Description and Budget Item Justification

  Program-Wide Support (PWS) contains non-headquarters management costs in support of MDA functions and activities across the entire Ballistic Missile Defense System (BMDS). Includes Government Civilians, Advisory and Assistance Services, and Federally Funded Research and Development Centers (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 (with the exception of Federal Office Building 2 after FY 2011), such as physical and technical security, legal services, travel and agency training, office and equipment leases, rents and utilities, data and unified communications support, supplies and maintenance, logistics and central property management of equipment, and similar operating expenses. Also includes legal settlements, and foreign currency fluctuations on a limited number of foreign contracts. In keeping with congressional intent, PWS 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 2011**	**FY 2012**	**FY 2013**
Title: Civilian Salaries and Support	2.996	2.841	3.201
Articles:	0	0	0
Description: See Description Below *FY 2011 Accomplishments:* See paragraph A, Mission Description and Budget Item Justification *FY 2012 Plans:* See paragraph A, Mission Description and Budget Item Justification *FY 2013 Plans:* See paragraph A, Mission Description and budget item justification.			
Accomplishments/Planned Programs Subtotals	2.996	2.841	3.201

C. Other Program Funding Summary ($ in Millions)
  N/A

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Missile Defense Agency		**DATE:** February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603904C: *Missile Defense Integration &* *Operations Center (MDIOC)*	**PROJECT** MD40: *Program-Wide Support*

D. Acquisition Strategy

　N/A

E. Performance Metrics

　N/A