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<b>Missile Defense Agency (MDA) Exhibit R-2 RDT&amp;E Budget Item Justification</b>					Date <b>May 2009</b>			
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<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 NOMENCLATURE</b>				
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>				<b>0603898C BMD Joint Warfighter Support</b>				

COST (\$ in Thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Total PE Cost	45,400	69,743	60,921					
XX03 Joint Warfighter Sustainment	5,063	5,394	6,491					
YX03 Joint Warfighter	37,730	62,332	51,847					
ZX40 Program-Wide Support	2,607	2,017	2,583					

*Beginning in FY09 funding that previously supported Warfighter Support Center Exercise and Wargame activities as well as Ballistic Missile Defense System Manager support efforts within Program Elements 0603904C (Ground-Based Midcourse Defense) and 0603882C (Missile Defense Integration and Operations Center), were moved into the Joint Warfighter Program Element 0603898C, YX03 Project. These realignments resulted in an apparent increase in total funding between FY08 and later years, but are actually a consolidation of program funding reported in this single Program Element, starting with an addition of \$20.233 million in FY09 (\$9.101 million from PE 0603904C and \$11.132 million from PE 0603882C), and continuing through the FYDP.*

**A. Mission Description and Budget Item Justification**

The Joint Warfighter Support Program is planned and executed by the Directorate for Warfighter Interface--the Missile Defense Agency's principal interface to the Warfighter (i.e., the Combatant Commands and their Functional/Service Components; the Joint Staff; and the Military Services). The Directorate for Warfighter Interface is responsible to the MDA Director and Deputy Director for planning, programming, coordinating and executing directed developmental and deployment activities of the integrated BMDS to the Warfighter. The Directorate for Warfighter Interface accomplishes its mission through two Divisions: the Warfighter Support Center; and the Joint Staff, Service, COCOM Integration Division (Cell). The Joint Warfighter Support Program enables the Warfighter to: define, test, deploy and employ new missile defense capabilities; train to maintain proficiency with current capabilities; and provide feedback and support Warfighter involvement in MDA's BMDS development process. The core functions outlined below are tailored each year to match BMDS capabilities as they near transition, or transition to fielded use:

- Real world operations/contingency support (e.g., BURNT FROST Satellite Shoot down, FAST SHIELD TD-2 Planning, AN/TPY-2 to Israel)
- BMDS Wargames, Exercises and Experiments (including support to Combatant Command exercises such as JUNIPER COBRA)
- BMDS Training and Education (individual, collective, and joint delivered via BMDS Schoolhouse, web-based and/or distributed)
- Capability Delivery (through the BMD Master Plan) and the Warfighter Involvement Process (which includes development of the BMDS Prioritized Capabilities List with Strategic Command)
- Joint Staff, Service and Combatant Command Interface for the transition and transfer of BMDS capabilities to Lead Services
- Development and evolution of BMDS competencies within the Combatant Commands (and their Service Components), Joint Staff and Services

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<ul style="list-style-type: none"><li>Shift Warfighter focus from Strategic Capabilities to Regional Capabilities that directly support the Geographic Combatant Commanders</li></ul> <p><b><u>A.1 System Element Description</u></b></p> <p>The Joint Warfighter Support Program enables the Warfighter and the Developer to work together to coordinate:</p> <ul style="list-style-type: none"><li>System requirements, capability needs, and the identification of gaps and seams in warfighting capability.</li><li>Inputs to BMDS development and product improvements (through Modification and Fielding Requests).</li><li>Timely responses to Warfighter Requests for Information and Requests for Analyses.</li><li>BMDS objectives incorporated into Combatant Commander and Developer-sponsored wargames and exercises.</li><li>System-level training/mission rehearsal for fielded capabilities and familiarization on new capabilities.</li><li>System level sustainment, operations support and operational readiness of the fielded BMDS.</li></ul> <p>Bottom Line: the Directorate for Warfighter Interface enables the effective delivery of BMDS capabilities to the Warfighter and ensures Warfighter participation in the identification and development of new capabilities</p> <p>The Joint Warfighter Support Program is executed primarily by MDA's Warfighter Support Center through two projects: Joint Warfighter Sustainment, (which includes Operations Support Center activities); and Joint Warfighter Support, (which includes the activities of the Joint Staff, Service and Combatant Commander Integration Cell).</p> <p><b><u>A.2 System Element Budget Justification and Contribution to the Ballistic Missile Defense System (BMDS)</u></b></p> <p>The Warfighter Support Center contributes to the BMDS by performing the following functions:</p> <ul style="list-style-type: none"><li>Provide BMDS situational awareness and provides technical assistance that enables senior leader decisions.</li><li>Support BMDS Asset Management, Configuration Management, Operational Readiness and Fielding Integration in support of the Warfighter.</li><li>Provide BMDS Operational Support, coordinating BMDS Asset Management, and BMDS status monitoring and reporting through the MDA Operations Support Center and BMDS Watch Officers.</li><li>Provide system level BMDS Training and Education activities not currently performed by the Services</li><li>Integrate BMDS-Level training and education into Joint and Service training environments for all mission areas</li></ul>		

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<ul style="list-style-type: none"><li>• Produce concepts and plans that examine evolving and predicted BMDS capabilities to ensure the BMDS keeps pace with the evolving technical and strategic environment.</li><li>• Enable the Warfighter's input to the BMDS development effort via the Warfighter Involvement Process.</li><li>• Conduct Exercises and Wargames for current and emerging BMDS capabilities that allow hands-on, system exposure, thereby, providing important feedback to the Developer</li><li>• Create, develop and coordinate BMDS-wide Integrated Support policies and procedures for each new BMDS Block.</li><li>• Provide direct support to the Geographic Combatant Commanders to enable Warfighter participation in applicable exercises, wargaming and training activities</li><li>• Enable Joint Staff and Service collaboration on BMDS issues by providing strategic level interfaces among MDA, the Military Services, and the Joint Staff.</li><li>• Focus on cross-Departmental initiatives (such as the transition of BMDS Elements to the Services), and cross-Departmental Corporate Boards (such as the Missile Defense Executive Board)</li></ul>		
<b><u>A.3 Major System Element Goals</u></b>		
The Directorate for Warfighter Interface Major Goals:		
<ul style="list-style-type: none"><li>• Develop and maintain up to the minute BMDS situational awareness and provide technical assistance that enables senior leader decisions</li><li>• Plan and execute real time BMDS Asset Management, Configuration Management, Operational Readiness and Fielding Integration in support of the Warfighter</li><li>• Perform 24/7 BMDS Operations Support /coordinate BMDS Asset Management, and monitor/ report BMDS status through the MDA Operations Support Center and BMDS Watch Officers</li><li>• Develop and maintain system level BMDS Training and Education activities matched to the latest BMDS configurations</li><li>• Integrate BMDS-Level training and education Into Joint and Service schools and training environments</li><li>• Produce Concepts and Plans that examine evolving and predicted BMDS capabilities to ensure the BMDS keeps pace with the evolving technical and strategic environment.</li><li>• Ensure Warfighter input to the BMDS development effort via the Warfighter Involvement Process in a timely manner.</li><li>• Update all Exercises and Wargames to reflect current and emerging BMDS capabilities to allow hands on, system exposure and user training and feedback to the Developer</li></ul>		

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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>
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- Conduct annual or semi-annual Exercises and Wargames for current and emerging BMDS capabilities that allow user training and feedback to the developer
- Coordinate BMDS-wide Integrated Operational Support policies and procedures for each new BMDS Block
- Provide direct and timely support to the Geographic Combatant Commanders to ensure Warfighter participation in applicable exercises, wargaming and training activities.
- Maintain continuous Joint Staff interface to MDA, monitor Joint Staff initiatives that impact the BMDS, and provide timely and accurate responses to all Joint Staff Requests for Information and Requests for Analyses
- Support Military Services in the efficient and cost-effective transition of BMDS elements by facilitating their involvement in planning and cost estimating in the earliest phases of BMDS elements' development.
- Ensure that MDA leadership is effectively prepared to represent the Agency in external venues, such as the Missile Defense Executive Board and Strategic Command-led General Office Steering Committee (a principals' forum of the Combatant Commands Air and Missile Defense management Structure)

**A.4 Major Events Schedule and Description**

<b>Major Event</b>	<b>Project</b>	<b>Timeframe</b>
<b>Contract Activity</b>		
<b>Operation &amp; Sustainment</b>		
ASSURED RESPONSE Exercise Series	YX03	1Q FY 2008
Global Lightning Exercise Series	YX03	1Q FY 2008
VIGILANT SHIELD Exercise Series	YX03	1Q FY 2008
BMDS Training Center Initial Operating Capability	YX03	2Q FY 2008
Complete Integration of C2BMC and BTEC	YX03	2Q FY 2008
TERMINAL FURY Exercise Series	YX03	2Q FY 2008
ARDENT SENTRY Exercise Series	YX03	3Q FY 2008
ASSURED RESPONSE Exercise Series	YX03	3Q FY 2008
AUSTERE CHALLENGE Exercise Series	YX03	3Q FY 2008
BMDS Joint Integrated Logistics Support Mgt Team Conference	YX03	3Q FY 2008
BMDS Logistics Support Contingency Plan Update	YX03	3Q FY 2008
EAGLE RESOLVE Exercise Series	YX03	3Q FY 2008
GLOBAL STORM Exercise Series	YX03	3Q FY 2008
KEEN EDGE Exercise Series	YX03	3Q FY 2008
NIMBLE TITAN Wargame Series	YX03	3Q FY 2008
GLOBAL THUNDER Exercise Series	YX03	4Q FY 2008
JOINT PROJECT ALLIANCE / WINDOW (JPOA/W)	YX03	4Q FY 2008

MDA Exhibit R-2 (PE 0603898C)

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<b>Major Event</b>	<b>Project</b>	<b>Timeframe</b>
KEEN EDGE Exercise Series	YX03	4Q FY 2008
FUTURE EPOCH Wargame Series	YX03	1Q FY 2009
Global Lightning Exercise Series	YX03	1Q FY 2009
VIGILANT SHIELD Exercise Series	YX03	1Q FY 2009
BMDs Training Center Full Operations Capability	YX03	2Q FY 2009
KEEN EDGE Exercise Series	YX03	2Q FY 2009
ARDENT SENTRY Exercise Series	YX03	3Q FY 2009
ASSURED RESPONSE Exercise Series	YX03	3Q FY 2009
AUSTERE CHALLENGE Exercise Series	YX03	3Q FY 2009
BMDs Joint Integrated Logistics Support Mgt Team Conference	YX03	3Q FY 2009
BMDs Logistics Support Contingency Plan Update	YX03	3Q FY 2009
EAGLE RESOLVE Exercise Series	YX03	3Q FY 2009
GLOBAL THUNDER Exercise Series	YX03	3Q FY 2009
TERMINAL FURY Exercise Series	YX03	3Q FY 2009
Global Lightning Exercise Series	YX03	1Q FY 2010
VIGILANT SHIELD Exercise Series	YX03	1Q FY 2010
ASSURED RESPONSE Exercise Series	YX03	2Q FY 2010
JUNIPER COBRA Exercise Series	YX03	2Q FY 2010
KEEN EDGE Exercise Series	YX03	2Q FY 2010
ARDENT SENTRY Exercise Series	YX03	3Q FY 2010
AUSTERE CHALLENGE Exercise Series	YX03	3Q FY 2010
BMDs Joint Integrated Logistics Support Mgt Team Conference	YX03	3Q FY 2010
BMDs Logistics Support Contingency Plan Update	YX03	3Q FY 2010
EAGLE RESOLVE Exercise Series	YX03	3Q FY 2010
GLOBAL STORM Exercise Series	YX03	3Q FY 2010
GLOBAL THUNDER Exercise Series	YX03	3Q FY 2010
NIMBLE TITAN Wargame Series	YX03	3Q FY 2010
TERMINAL FURY Exercise Series	YX03	3Q FY 2010
ASSURED RESPONSE Exercise Series	YX03	4Q FY 2010
<b>Sustainment</b>		
Develop Automated Configuration Management Tool	XX03	1Q FY 2008 - 4Q FY 2008
Operational Readiness Automated Tool Development	XX03	1Q FY 2008 - 4Q FY 2008
BMDs Asset Management Tool Development/Upgrade	XX03	2Q FY 2008
Operations Support Center Build-Out	XX03	2Q FY 2008 - 4Q FY 2008
Operations Support Center Continuity of Operations	XX03	3Q FY 2008
BMDs Handbook On-line Tool Development/Upgrade	XX03	3Q FY 2008 - 4Q FY 2008

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<b>Major Event</b>	<b>Project</b>	<b>Timeframe</b>
BMDS Asset Management Tool Development/Upgrade	XX03	4Q FY 2008
BMD System Operability Check (BSOC)	XX03	1Q FY 2009 - 2Q FY 2009
BMDS Handbook On-line Tool Development/Upgrade	XX03	2Q FY 2009
BMD System Operability Check (BSOC)	XX03	3Q FY 2009
BMDS Asset Management Tool Development/Upgrade	XX03	3Q FY 2009
BMD System Operability Check (BSOC)	XX03	4Q FY 2009
BMDS Handbook On-line Tool Development/Upgrade	XX03	4Q FY 2009
Operations Support Center Continuity of Operations	XX03	4Q FY 2009
BMD System Operability Check (BSOC)	XX03	1Q FY 2010
BMDS Asset Management Tool Development/Upgrade	XX03	1Q FY 2010
Operational Readiness Automated Tool Development	XX03	1Q FY 2010
BMD System Operability Check (BSOC)	XX03	2Q FY 2010
BMDS Handbook On-line Tool Development/Upgrade	XX03	2Q FY 2010
Operational Readiness Automated Tool Development	XX03	2Q FY 2010
Operations Support Center Continuity of Operations	XX03	2Q FY 2010
BMD System Operability Check (BSOC)	XX03	3Q FY 2010
BMDS Asset Management Tool Development/Upgrade	XX03	3Q FY 2010
Operational Readiness Automated Tool Development	XX03	3Q FY 2010
BMD System Operability Check (BSOC)	XX03	4Q FY 2010
BMDS Handbook On-line Tool Development/Upgrade	XX03	4Q FY 2010
Develop Automated Configuration Management Tool	XX03	4Q FY 2010
Operational Readiness Automated Tool Development	XX03	4Q FY 2010

<b>B. Program Change Summary</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
Previous President's Budget (FY2009 PB)	49,394	69,982	73,997	
Current President's Budget (FY2010 PB)	45,400	69,743	60,921	
Total Adjustments	-3,994	-239	-13,076	
Congressional Program Reductions	0	-239	0	
Congressional Rescissions	0	0	0	
Total Congressional Increases	0	0	0	
Total Reprogrammings	-3,207	0	0	
SBIR/STTR Transfer	-787	0	0	
Adjustments to Budget Years	0	0	-13,076	

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FY08 decrease of \$3.994 million includes Small Business Innovation Research/Small Business Technology Transfer and MDA reprogramming		
FY09 decrease of \$239 thousand includes Congressional program reductions		
FY10 Program Changes: The decrease of \$13.076 million reflects MDA efforts to transition key operations and sustainment responsibilities to the Combatant Commands and Services		

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<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 NOMENCLATURE</b>				
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>				<b>0603898C BMD Joint Warfighter Support</b>				

COST (\$ in Thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
XX03 Joint Warfighter Sustainment	5,063	5,394	6,491					
RDT&E Articles Qty	0	0	0					

*Note:*

**A. Mission Description and Budget Item Justification**

The Directorate of Warfighter Interface's Operations Support Center serves as the MDA focal point for maintaining situational awareness of the BMDS. To that end, it coordinates asset management and operational reporting. Specific Operations Support Division responsibilities include:

- Man and operate the MDA's Operations Support Center 24 /7/365 to gather, develop, maintain, communicate and correlate all BMDS situational awareness data concerning the current Health and Status of the BMDS, maintaining operational and exercise configuration control of the BMDS architecture, reporting operational readiness, conducting pre-fielding and fielding asset coordination responsibilities, providing real time BMDS information to all BMDS stakeholders and providing crisis action planning and support during exercises and real world contingencies.
- Maintain approved BMDS operational configuration and enable on-site developmental operations, sustainment, and operational activities in a Concurrent Test, Training and Operations environment.
- Precisely align BMDS components in accordance with the currently approved Operational or Test Configuration.
- Serve as the MDA BMDS Asset Management office of primary responsibility for coordinating and providing integrated MDA development, maintenance and training inputs into the Asset Management Process.
- Conduct pre-fielding and fielding actions that enable emerging BMDS capabilities to rapidly achieve Partial and Full Mission Capability. Extensive coordination with MDA Elements and the Warfighting community is required to ensure rapid and effective fielding.
- Support MDA Warfighter/Service efforts to monitor, collect, and analyze BMDS operational readiness data to communicate past and present BMDS operational readiness and improve future performance.
- Maintain BMDS Operational Baseline documentation and associated Operational Configuration documentation to include the BMDS Handbook and technical library.
- Maintain applicable configuration documents for BMDS Elements and the Warfighter Support Center.

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<b><u>B. Accomplishments/Planned Program</u></b>				
	FY 2008	FY 2009	FY 2010	FY 2011
Sustainment and Operations - Operations Support Center	5,063	5,394	6,491	
RDT&E Articles (Quantity)	0	0	0	

**FY08 Accomplishments:**

- Completed Operations Support Center relocation and integrated BMDS Elements into the Operations Support Center watch standing teams.
- Streamlined the BMDS scheduling/asset management process to deconflict operational and developmental BMDS activities.
- Improved the oversight of the BDMS operational configuration by developing automated tools and visualization aids to provide increased fidelity and technical detail in configuration specifications needed to support transition activities in a Continuous Test and Training Operations environment.
- Matured BMDS operational readiness across MDA by development and implementation of automated tools coordinating and aligning BMDS scheduled maintenance to maximize availability.
- Monitored BMDS readiness (e.g., Operational Capability, Protection Capability, Reliability/Availability/Maintainability, and Maintenance Data) and recommend proactive measures to increase Element and System readiness postures.
- Continued the integration of Capability Demonstration-like objectives into the Ground Test Campaign to increase Warfighter confidence in emerging BMDS capabilities.
- Updated and published BMDS Handbook for BMDS Block 1.

**FY09 Planned Program:**

- Improve situational awareness, technical reach-back and connectivity to MDA developmental, testing, and fielding organizations. Continue to streamline the BMDS scheduling/asset management process to deconflict operational and developmental BMDS activities.
- Continue improvements in overseeing the BDMS operational configuration and increase fidelity and technical detail in configuration specifications needed to support transition activities.
- Continue to coordinate and align BMDS scheduled maintenance to maximize availability.
- Fully integrate Capability Demonstration-like objectives into the Ground Test Campaign to increase Warfighter confidence in emerging BMDS capabilities.

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<ul style="list-style-type: none"><li>Continue to update the Block 1 BMDS Handbook and create and publish the BMDS Handbook for BMDS Blocks 2 and 3.</li><li>Develop and implement BMDS System Operability Check concept document and implementation plans.</li><li>Implement quarterly BMDS System Operability Check tests.</li></ul> <p>FY10 Planned Program:</p> <ul style="list-style-type: none"><li>Continue to develop Operations Support Center capabilities based on BMDS capabilities joining the operational baseline.</li><li>Continue to improve situational awareness, technical reach-back and connectivity to MDA developmental, testing, and fielding organizations and assist the Joint Functional Component Command for Integrated Missile Defense in planning and executing multiple Readiness Demonstrations.</li><li>Continue to streamline the BMDS scheduling/asset management process. Develop new web-based asset management tools to provide streamline support to the Warfighter.</li><li>Continue improvements in overseeing the BDMS operational configuration and increase fidelity and technical detail in configuration specifications.</li><li>Continue to coordinate and align BMDS scheduled maintenance to maximize availability.</li><li>Continue integration of Capability Demonstration-like objectives into the Ground Test Campaign.</li><li>Continue to update the BMDS Handbook and create and publish the BMDS Handbook for BMDS Block 4 and 5.</li><li>Continue quarterly BMDS System Operability Check continuity tests.</li><li>Update BMDS-wide Integrated Logistics Support Plans and Sustainment Directive.</li><li>Develop and Beta-test the BMDS Operational Readiness Reporting System as part of the operational readiness automated tool development process.</li><li>Chair and sponsor periodic (planned monthly) BMDS Integrated Logistics Support Team meetings for Action Officer-level interface and exchange.</li><li>Execute the annual Joint Integrated Logistics Support Management Team Conference for Senior Mentor and Action Officer-level interface.</li></ul>		

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<b>C. Other Program Funding Summary</b>	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Total Cost
PE 0603175C Ballistic Missile Defense Technology	106,437	119,308	109,760						-
PE 0603881C Ballistic Missile Defense Terminal Defense Segment	1,034,478	956,686	719,465						-
PE 0603882C Ballistic Missile Defense Midcourse Defense Segment	2,198,664	1,507,481	982,922						-
PE 0603883C Ballistic Missile Defense Boost Defense Segment	503,475	400,751	186,697						-
PE 0603884C Ballistic Missile Defense Sensors	574,231	777,693	636,856						-
PE 0603886C Ballistic Missile Defense System Interceptors	330,874	385,493	0						-
PE 0603888C Ballistic Missile Defense Test and Targets	619,137	919,956	966,752						-
PE 0603890C Ballistic Missile Defense Enabling Programs	416,937	402,778	369,145						-
PE 0603891C Special Programs – MDA	193,157	175,712	301,566						-
PE 0603892C Ballistic Missile Defense Aegis	1,126,337	1,113,655	1,690,758						-
PE 0603893C Space Tracking & Surveillance System	226,499	208,923	180,000						-
PE 0603894C Multiple Kill Vehicle	223,084	283,481	0						-
PE 0603895C BMD System Space Program	16,237	24,686	12,549						-
PE 0603896C BMD C2BMC	439,997	288,287	340,014						-
PE 0603897C BMD Hercules	51,387	55,764	48,186						-
PE 0603904C Missile Defense Integration & Operations Center (MDIOC)	77,102	106,040	86,949						-
PE 0603906C Regarding Trench	1,945	2,968	6,164						-
PE 0603907C Sea Based X-Band Radar (SBX)	155,244	146,895	174,576						-
PE 0603908C BMD Europ Intercep Site	0	362,007	0						-
PE 0603909C BMD Europ Midcourse Radar	0	76,537	0						-
PE 0603911C BMD European Capability	0	0	50,504						-
PE 0603912C BMD European Comm Support	0	27,008	0						-
PE 0603913C Israeli Cooperative	0	0	119,634						-
PE 0605502C Small Business Innovative Research BMDO	137,409	0	0						-
PE 0901585C Pentagon Reservation	5,971	19,667	19,709						-
PE 0901598C Management Headquarters – MDA	83,907	81,174	57,403						-

*Note: The Ballistic Missile Defense System is an integrated, interoperable, global defense system. The programs which comprise the Ballistic Missile Defense System are interdependent.*

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**D. Acquisition Strategy**

This project, within the Joint Warfighter Support Program, will continue to follow the MDA's capability-based acquisition strategy that emphasizes assessment, spiral-development testing and evolutionary acquisition--in collaboration with the Combatant Commanders and their Service Components, the Joint Staff, and the Military Services.

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<b>Missile Defense Agency (MDA) Exhibit R-3 RDT&amp;E Project Cost Analysis</b>	Date <b>May 2009</b>
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**I. Product Development Cost ( \$ in Thousands )**

Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
Subtotal Product Development										

**Remarks**

**II. Support Costs Cost ( \$ in Thousands )**

Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
<b>Sustainment and Operations - Operations Support Center</b>										
Operations Support Center Operations	C/CPFF	MDIOC/ Colorado Springs, CO	391	685	1/2Q	760	1/2Q			1,836
BMDS Operational Readiness Reporting System (BORRS)	C/TM	MDIOC/ Colorado Springs, CO	0	0	N/A	361	1/3Q			361
Subtotal Support Costs			391	685		1,121				2,197

**Remarks**

**III. Test and Evaluation Cost ( \$ in Thousands )**

Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
Subtotal Test and Evaluation										

**Remarks**

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Missile Defense Agency (MDA) Exhibit R-3 RDT&E Project Cost Analysis							Date May 2009			
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)					R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support					
<b>IV. Management Services Cost ( \$ in Thousands )</b>										
Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
<b>Sustainment and Operations - Operations Support Center</b>										
Operations Support Center Government Salaries	C/TM	MDIOC/ Colorado Springs, CO	1,318	1,191	1/4Q	1,529	1/4Q			4,038
Operations Support Center Contractor Technical Support	C/CPFF	SPARTA/ Colorado Springs, CO	3,268	3,428	1/3Q	3,745	1/3Q			10,441
Government Staff Travel	C/TM	MDIOC/ Colorado Springs, CO	86	90	1/4Q	96	1/4Q			272
Subtotal Management Services			4,672	4,709		5,370				14,751
<b>Remarks</b>										
Project Total Cost			5,063	5,394		6,491				16,948
<b>Remarks</b>										

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**Missile Defense Agency (MDA) Exhibit R-4 RDT&E Schedule Profile**

Date  
**May 2009**

**APPROPRIATION/BUDGET ACTIVITY**  
**RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)**

**R-1 NOMENCLATURE**  
**0603898C BMD Joint Warfighter Support**

Fiscal Year	2008				2009				2010				2011				2012				2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Sustainment</b>																																
Operational Readiness Automated Tool Development	▲	—	—	▲					△	△	△	△																				
Operations Support Center Build-Out		▲	—	▲																												
BMDS Asset Management Tool Development/Upgrade		▲		▲			△			△		△																				
Operations Support Center Continuity of Operations			▲					△		△																						
BMDS Handbook On-line Tool Development/Upgrade			▲	▲		▲				△		△																				
Develop Automated Configuration Management Tool	▲	—	—	▲																												
BMD System Operability Check (BSOC)					▲	▲			△	△	△	△																				

**Legend**

▲	Significant Event (complete)	▲	Significant Event (planned)
★	Milestone Decision (complete)	★	Milestone Decision (planned)
◆	Element Test (complete)	◇	Element Test (planned)
◡	System Level Test (complete)	◡	System Level Test (planned)
▲—▲	Complete Activity	▲—▲	Planned Activity

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Missile Defense Agency (MDA) Exhibit R-4A Schedule Detail						Date May 2009		
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)				R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support				
Schedule Profile	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
<b>Sustainment</b>								
Operational Readiness Automated Tool Development	1Q-4Q		1Q,2Q,3Q,4Q					
Operations Support Center Build-Out	2Q-4Q							
BMDS Asset Management Tool Development/Upgrade	2Q,4Q	3Q	1Q,3Q					
Operations Support Center Continuity of Operations	3Q	4Q	2Q					
BMDS Handbook On-line Tool Development/Upgrade	3Q-4Q	2Q,4Q	2Q,4Q					
Develop Automated Configuration Management Tool	1Q-4Q		4Q					
BMD System Operability Check (BSOC)		1Q-2Q,3Q,4Q	1Q,2Q,3Q,4Q					

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>						Date <b>May 2009</b>		
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<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 NOMENCLATURE</b>				
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>				<b>0603898C BMD Joint Warfighter Support</b>				

COST (\$ in Thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
YX03 Joint Warfighter	37,730	62,332	51,847					
RDT&E Articles Qty	0	0	0					

*Note: Beginning in FY09 funding that previously supported Warfighter Support Center Exercise and Wargame activities as well as Ballistic Missile Defense System Manager support efforts within Program Elements 0603904C (Ground-Based Missile Defense) and 0603882C (Missile Defense Integration and Operations Center), were moved into the Joint Warfighter Program Element 0603898C, YX03 Project. These realignments result in an apparent increase in total funding between FY08 and later years, but are actually a consolidation of program funding reported in this single Program Element, starting with an addition of \$20.233 million in FY09 (\$9.101 million from PE 0603904C and \$11.132 million from PE 0603882C), and continuing through the Future Year Defense Program.*

**A. Mission Description and Budget Item Justification**

This project (Joint Warfighter) is comprised of six primary functions/responsibilities: 1) Exercises, Wargames and Geographic Combatant Commander Support; 2) Concepts, Plans and Joint Staff/Service/COCOM Integration; 3) BMDS Logistics Support and Integrated Logistics Support Development; 4) BMDS Training and Education; 5) Warfighter Interface Management; 6) BMDS Manager:

Exercises, Wargames and Geographic Combatant Commander Support:

Conducting exercises and wargames enables end-user mission training, qualification, certification and rehearsal of mission operations, strengthens user confidence in the current system and shapes development of the future BMDS. This activity enables the Warfighter to build missile defense plans and Tactics, Techniques and Procedures for the near term BMDS, and then tests execution of those plans via high fidelity simulations. It also incorporates system engineering and interoperability test activities, when possible, to leverage MDA materiel development events by providing real-world training to operators. This activity provides analysis support, as required, for each wargame and exercise to conduct data collection and analysis, and prepares and publishes an event After Action Assessment Report. Finally, exercises and wargames create the conditions for continued, in-depth foreign and/or international participation in BMDS operations and development. Geographic Combatant Commander Support enables key Warfighters to participate in selected MDA activities, wargames and exercises to obtain their input and feedback on the BMDS developmental processes. Every year BMDS overlays are incorporated into Combatant Command Tier 1 Exercises to enable end-user mission rehearsal and sustainment training, qualification and certification of BMDS operations. The yearly, or in some cases every other year, exercises are necessary for both familiarization of the user, but also to ensure capability upgrades accomplished in each BMDS Block upgrade are added to the exercise and

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<p align="center"><b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b></p>		<p>Date <b>May 2009</b></p>
<p>APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b></p>	<p>R-1 NOMENCLATURE <b>0603898C BMD Joint Warfighter Support</b></p>	
<p>training scenarios. By involving participating Combatant Commands in building coherent missile defense plans and Tactics, Techniques and Procedures for the near term BMDS, and then testing cohesive execution of those plans via high fidelity simulations, this effort optimizes BMDS operational effectiveness. The project exercises and wargames are :</p> <ul style="list-style-type: none"> <li>• U. S. Pacific Command Exercise TERMINAL FURY.</li> <li>• U.S. Forces Japan Exercise KEEN EDGE.</li> <li>• Combined Joint Functional Component Commander for Integrated Missile Defense and wargame: Allows introduction of U.S. BMDS issues in a combined Regional and Global context.</li> <li>• U. S. Central Command Exercise EAGLE RESOLVE.</li> <li>• U. S. Strategic Command GLOBAL SERIES exercises - Provides Global focus on strategic level objectives to include Strategic Deterrence, Global Strike and Space Control.</li> <li>• Joint Functional Component Commander for Integrated Missile Defense Exercise ASSURED RESPONSE.</li> <li>• U.S. Northern Command Exercise VIGILANT SHIELD and ARDENT SENTRY.</li> <li>• Combined-joint U.S. European Command: JUNIPER COBRA and AUSTERE CHALLENGE.</li> <li>• Wargame NIMBLE TITAN - Examines BMDS capabilities expected in 2018; and further defines policy and integration issues that need to be solved in relation to cross-Combatant Commands and Allied nation actions.</li> <li>• FUTURE EPOCH Wargame - Addresses Developer and Warfighter objectives related to future BMDS engagements; examines future capabilities and optimal employment, leveraging other agency efforts, events and lessons learned.</li> <li>• Smaller, focused Wargames / Demonstrations - Allows evaluation of future architecture configurations though facilitated collaboration between the Warfighter and the Developer allowing robust input from the Warfighter in the Warfighter Involvement Process and Prioritized Capability List processes.</li> <li>• Support on a non-interface basis, Combined Joint Functional Component Commander for Integrated Missile Defense and NATO missile defense exercise/wargame JOINT PROJECT OPTIC ALLIANCE / OPTIC WINDMILL: Allows introduction of U.S. BMDS issues in a combined Regional and Global context</li> </ul> <p>Concepts, Plans and Joint Staff/Service/COCOM Integration:</p> <p>These functions enable effective operation of emerging and future BMDS material capabilities and technologies. These activities result in Warfighter development of new BMDS employment constructs and Concepts of Operation. They also serve MDA as the vehicle for the Warfighter Involvement Process which seeks user feedback and guidance to shape future Block development of the BMDS and serves as the lead for the conduct of</p>		

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Missile Defense Agency (MDA) Exhibit R-2A RDT&E Project Justification		Date May 2009
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support	
<p>operational readiness assessments and Military Utility Assessments for the BMDS and is the integration point for the Warfighter Requests for Information and Requests for Analyses. The continuing efforts include</p> <ul style="list-style-type: none"><li>• Support to the Joint Functional Component Commander for Integrated Missile Defense BMDS Table Top Exercise(s) to facilitate the Global and to refine the European Capability Concept of Operations through low fidelity demonstration modeling simulations and MDA coordination</li><li>• Developing Table Top evolutions to include future concepts and BMDS assets; conducting System Capability Reviews of new BMDS assets approaching the timeline to be fielded</li><li>• Providing 24 hours per day/7 days per week MDA analysis support to Warfighter Exercises and to the Joint Staff, Services and Combatant Commands in order to document, validate, and prioritize new BMDS capabilities desired by the Warfighters, as well as enhancements to the characteristics of fielded capabilities through the Warfighter Involvement Process</li><li>• Annual update of the BMDS Prioritized Capabilities List reflecting Combatant Command priorities for needed BMDS enhancements</li><li>• Conduct Studies and Analyses, as required, to examine emergent Single Integrated Air Picture issues from a BMDS perspective and assess emerging technologies, studies, and theories for incorporation into future BMDS development</li><li>• Conduct Studies and Analyses to support Joint Staff and Service BMDS Integration efforts required to ensure all aspects of the BMDS successfully transition from development to field use</li><li>• Conduct BMDS Table Top exercises with low fidelity demonstrations for our friends and allies, working with the MDA Deputy for International Programs and the Combatant Commanders</li><li>• Work with the Terminal High-Altitude Area Defense, and other Program Offices and the Warfighter to establish Concepts of Operations that will support future MDA development</li><li>• Provide strategic-level interfaces. between MDA and the Military Services and the Joint Staff with a focus on cross-Departmental initiatives (such as the transition of BMDS Elements/Components to the Services), and cross-Departmental Corporate Boards (such as the Missile Defense Executive Board)</li><li>• Maintain daily, strategic-level interfaces with the Military Services and Joint Staff, providing them with the critical information they require to plan for the delivery, fielding, and operation of BMDS capabilities.</li><li>• Provide direct support to the Director's Action Group for MDA senior leadership projects</li><li>• Support MDA Senior Leadership participation in the MDEB, the Joint Requirements Oversight Council, the Joint Capability Boards and other interdepartmental venues</li><li>• Directly interface with the Services, Joint Staff and Combatant Command on missile defense policy issues</li><li>• Ensure senior leadership is prepared for all external engagements (executive boards, testimony, Combatant Command visits, public engagements, etc) as relates to operational BMDS strategic planning and policy</li></ul>		

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>		Date <b>May 2009</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDTE&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	R-1 NOMENCLATURE <b>0603898C BMD Joint Warfighter Support</b>	
<ul style="list-style-type: none"><li>• Enable BMDS operational situational awareness and real-world crisis response to the leadership through the MDA/HQ Mission Operations Center</li><li>• Provide MDA's planner level coordination for Combatant Command, Joint Staff, and inter-agency staff actions</li></ul> <p>BMDS Logistics Support and Integrated Logistics Support Development:</p> <p>This function creates, develops and coordinates BMDS-wide Integrated Operational Support policies and procedures to ensure that the requisite Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities and funding will be in place to sustain the deployed BMDS Block capabilities. It also is responsible for planning for a Logistics Supportability framework and implementing BMDS Logistics and Sustainment planning at the Strategic level. During FY 2008, the Missile Defense Agency continued implementing a re-engineering and restructuring plan based on a functional matrix concept. As MDA transitions logistics support responsibilities to the Services (through Hybrid Program Offices and/or Service Transition and Transfer Cells), these responsibilities will transition also.</p> <p>BMDS Training and Education:</p> <p>This activity develops and maintains BMDS Training and Education at the system level that is not conducted by the Services. Courses for Joint Warfighters, Department of Defense officials and the Services provide critical knowledge on BMDS capabilities and system operation. A key part of this activity includes developing BMDS educational courses and conducting education and training of select BMDS stakeholders, staffs and organizations on emerging BMDS Block deployment capabilities. As new BMDS capabilities are transitioned to the field, upgrades and improvements will be incorporated to maintain the requisite level of training. Annual service provided by this effort include:</p> <ul style="list-style-type: none"><li>• Operating the BMDS Training and Education Center; providing BMDS-Level Training and Education for the Joint Warfighters, Defense Officials and Services</li><li>• Providing Training Transition support to the Services</li><li>• Hosting Integrated Ballistic Missile Defense Training Working Groups/Conferences</li><li>• Reviewing all training curriculum to ensure continuously improved Command and Control, Battle Management, and Communications Training by the BMDS Training &amp; Education Center</li><li>• Providing 130 courses (~2500 hours of instruction) to approximately 1600 students</li><li>• Providing simulated missile injects over the live satellite Theater Event System broadcast</li></ul>		

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>		Date <b>May 2009</b>		
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>		<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>		
<p>Warfighter Interface Management:</p> <p>The Directorate for Warfighter Interface consists of an overall management function and two divisions: the Warfighter Support Center located in Colorado Springs, Colorado and the Joint Staff, Service, COCOM Integration Cell in the National Capital Region (NCR). The Warfighter Support Center was created through an intensive reengineering effort from legacy organizations, funding, manpower, and processes. The purpose of this re-engineering was to consolidate BMD System Level exercise, wargame, and training efforts into a single center of excellence in Colorado Springs, Colorado at the Missile Defense Integrated Operations Center (MDIOC).</p> <p>Ballistic Missile Defense System Manager:</p> <p>The Ballistic Missile Defense System Manager staff (within the U.S. Army's Space and Missile Defense Command) functions to ensure proper integration of BMDS capabilities within the Services. These activities include:</p> <ul style="list-style-type: none"> <li>• Centralized integration of Doctrine, Organization, Training, Leader Development, Personnel and Facilities domain products across the BMDS Elements</li> <li>• Serving as the single user representative for the Ground-based Midcourse Defense and the AN/TPY-2 Forward Based X-Band Radar materiel developers and centralized management and integration of Ground-based Midcourse Defense and AN/TPY-2 Doctrine, Organization, Training, Leader Development, Personnel and Facilities products</li> <li>• Joint integration and problem resolution as the Army's Lead Service and Executive Agent for Ground-based Midcourse Defense operations and the AN/TPY-2 radar</li> <li>• Conducting BMDS Combined Element Reviews on behalf of Combatant Commands, Services, and the BMDS materiel developer</li> <li>• Preparing and updating BMDS Activation Plans and Emergency Activation Plan annexes</li> </ul> <p>As MDA transitions logistics support and Doctrine, Organization, Training, Leader Development, Personnel and Facilities product development responsibilities to the Services (through Hybrid Program Offices and/or Service Transition and Transfer Cells), these responsibilities will transition also.</p>				
<b><u>B. Accomplishments/Planned Program</u></b>				
	FY 2008	FY 2009	FY 2010	FY 2011

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>			Date <b>May 2009</b>	
<b>APPROPRIATION/BUDGET ACTIVITY</b>		<b>R-1 NOMENCLATURE</b>		
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>		<b>0603898C BMD Joint Warfighter Support</b>		
Exercises, Wargames & Geographic Combatant Commander Support	15,288	28,619	33,600	
RDT&E Articles (Quantity)	0	0	0	
<p>FY08 Program Accomplishments:</p> <ul style="list-style-type: none"> <li>• Supported U. S. Pacific Command Exercise TERMINAL FURY 08.</li> <li>• Supported U.S. Forces Japan Exercise KEEN EDGE BMD Bridge Events 08.</li> <li>• Supported Exercise JOINT PROJECT ALLIANCE / WINDOW.</li> <li>• Supported BMDS overlay U. S. Central Command Exercise EAGLE RESOLVE 08.</li> <li>• Supported U. S. Strategic Command 6t5rGLOBAL SERIES Exercises 08.</li> <li>• Supported JFCC-IMD Exercise ASSURED RESPONSE 08A/B.</li> <li>• Conducted Wargames / Demos.</li> <li>• Conducted CONGRESSIONAL WARGAME (APR 08), National Missile Defense Conference Wargame (APR 08), and Multi-National Missile Defense Conference Wargame (SEP 08).</li> <li>• Conducted a FUTURE EPOCH WARGAME.</li> </ul> <p>FY09 Planned Program:</p> <ul style="list-style-type: none"> <li>• ASSURED RESPONSE Exercise Series 1Q FY 2009</li> <li>• FUTURE EPOCH Wargame Series 1Q FY 2009</li> <li>• Global Lightning Exercise Series 1Q FY 2009</li> <li>• VIGILENT SHIELD Exercise Series 1Q FY 2009</li> <li>• BMDS Training Center Full Operations Capability 2Q FY 2009</li> <li>• KEEN EDGE Exercise Series 2Q FY 2009</li> <li>• ARDENT SENTRY Exercise Series 3Q FY 2009</li> <li>• AUSTERE CHALLENGE Exercise Series 3Q FY 2009</li> <li>• BMDS Joint ILS Mgt Team Conference 3Q FY 2009</li> <li>• BMDS Logistics Support Contingency Plan Update 3Q FY 2009</li> <li>• EAGLE RESOLVE Exercise Series 3Q FY 2009</li> <li>• TERMINAL FURY Exercise Series 3Q FY 2009</li> </ul>				

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>		Date <b>May 2009</b>
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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>
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- GLOBAL THUNDER Exercise Series 4Q FY 2009
- Planning conference to prepare to conduct Wargame NIMBLE TITAN 10.

FY 10 Planned Program:

- Global Lightning Exercise Series 1Q FY 2010
- NIMBLE TITAN Wargame Series 1Q FY 2010
- VIGILENT SHIELD Exercise Series 1Q FY 2010
- JUNIPER COBRA Exercise Series 2Q FY 2010
- ARDENT SENTRY Exercise Series 3Q FY 2010
- AUSTERE CHALLENGE Exercise Series 3Q FY 2010
- BMDS Joint ILS Mgt Team Conference 3Q FY 2010
- BMDS Logistics Support Contingency Plan Update 3Q FY 2010
- EAGLE RESOLVE Exercise Series 3Q FY 2010
- GLOBAL STORM Exercise Series 3Q FY 2010
- TERMINAL FURY Exercise Series 3Q FY 2010
- GLOBAL THUNDER Exercise Series 4Q FY 2010

	FY 2008	FY 2009	FY 2010	FY 2011
Concepts, Plans & Joint Staff/Service/COCOM Integration	2,372	2,720	1,990	
RDT&E Articles (Quantity)	0	0	0	

FY08 Accomplishments:

- Supported Joint Functional Component Command for Integrated Missile Defense BMDS Table Top Exercises to facilitate development of the BMDS Global Concept of Operations.
- Updated the annual BMDS Prioritized Capabilities List to reflect Combatant Command priorities for needed BMDS enhancements.
- Assisted Strategic Command with the annual BMDS Military Utility Assessment, including participation in the BMDS Analysis Working Group.

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>		Date <b>May 2009</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	R-1 NOMENCLATURE <b>0603898C BMD Joint Warfighter Support</b>	
<ul style="list-style-type: none"> <li>• Supported the stand-down of the Flyingdales Integrated Task Force and expanded the charter of the Upgraded Early Warning Radar Integrated Task Force to address Warfighter issues and concerns with all sites (Flyingdales, Beale, Thule, Clear and Cape Cod).</li> <li>• Continued to work with the Terminal High-Altitude Area Defense Program Office and the Warfighter to establish Concept of Operations.</li> <li>• Coordinated and resolved transition and transfer planning by conducting regular Board of Director's meetings with each of the Military Services.</li> <li>• Worked with each of the Military Services to produce and coordinate draft transition and transfer documentation, tailored to the needs of each Service.</li> <li>• Conducted Weapon System Reviews with the Army Staff to inform them on BMDS capabilities and cost estimates in order to facilitate future budgeting and Program Operating Memorandum decisions.</li> <li>• Produced Joint Cost Estimates with the Army for the Terminal High Altitude Area defense system, the AN/TPY-2 radar and the Ground-based Midcourse Defense Ground-Based Interceptors and Ground Systems.</li> <li>• Coordinated efforts with the Navy to facilitate transition and transfer of the Sea-Based X-Band Radar, which includes leading an Immersion Day with Military Sealift Command, supporting the Navy Material Readiness Evaluation, co-leading the program office working group, beginning the Sea-Based X-Band Radar joint cost estimating process, and completing an Memorandum of Agreement with the Navy.</li> <li>• Coordinated Deputy Secretary of Defense approval of the national intelligence sensor, COBRA DANE, to enter the transition phase and ultimately transfer the capability to the USAF.</li> <li>• Coordinated Deputy Secretary of Defense approval of the Air Force as Lead service for the European Midcourse Radar.</li> <li>• Coordinated Deputy Secretary of Defense approval of the BMDS Life Cycle Management Process.</li> <li>• Prepared the MDA leadership to effectively represent the Agency to the Missile Defense Executive Board on critical topics, including the Transition and Transfer Business Rules, the Joint Capability Mix II study and Lead Service designation decisions.</li> <li>• Maintained strategic-level interfaces with the Military Services and the Joint Staff in support of multiple contingencies, including the February 2008 satellite shoot down.</li> </ul> <p>FY09 Planned Program:</p> <ul style="list-style-type: none"> <li>• Continue to support Joint Functional Component Command for Integrated Missile Defense BMDS Tabletop Exercises to facilitate development of the BMDS Global Concept of Operations</li> <li>• Update the annual BMDS Prioritized Capabilities List to reflect changes in Component Commander priorities for needed BMDS enhancements</li> <li>• Continue to assist Strategic Command with the annual BMDS Military Utility Assessment</li> <li>• Continue to support the Upgraded Early Warning Radars Integrated Task Force in order to address Warfighter issues and concerns with all sites</li> <li>• Continue to work with the Element Program Offices and the Warfighter to establish Concepts of Operation</li> </ul>		

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Missile Defense Agency (MDA) Exhibit R-2A RDT&E Project Justification		Date May 2009
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support	
<ul style="list-style-type: none"><li>• Continue Service coordination to resolve transition and transfer issues via decision-focused Board of Director meetings with each of the Military Services</li><li>• Continue to work with each of the Military Services to produce and coordinate draft transition and transfer documentation, tailored to the needs of each Service</li><li>• Continue to support Weapon System Reviews as required with the Lead Service to inform them on BMDS capabilities and cost estimates in order to facilitate future transition/transfer</li><li>• Coordinate efforts with eh designated Lead Services to facilitate transition/transfer of BMDS capabilities</li><li>• Continue to prepare the MDA leadership to represent the Agency to the Missile Defense Executive Board on critical BMDS related topics/decisions</li><li>• Continue strategic-level interfaces with the Military Services and the Joint Staff in support of multiple contingencies to include those like the BURNT FROST satellite shootdown and the deployment of the AN/TPY-2 radar to Israel</li></ul> <p>FY10 Planned Program:</p> <ul style="list-style-type: none"><li>• Support Component Command Tabletop Exercises to facilitate the development of Regional Concepts of Operation</li><li>• Assist Warfighters to update the annual BMDS Prioritized Capabilities List to reflect changes in Component Command priorities for needed BMDS enhancements</li><li>• Assist Strategic Command with its annual BMDS Military Utility Assessment</li><li>• Continue to work with the Program Offices and the Warfighter to establish Concepts of Operation for transitioning BMDS capabilities</li><li>• Continue Service coordination to resolve transition and transfer issues via decision-focused Board of Director meetings with each of the Military Services</li><li>• Continue to support Weapon System Reviews as required with the Lead Service to inform them on BMDS capabilities and cost estimates in order to facilitate future transition/transfer</li><li>• Coordinate efforts with the designated Lead Services to facilitate transition/transfer of BMDS capabilities</li><li>• Continue to prepare the MDA leadership to represent the Agency to the Missile Defense Executive Board on critical BMDS related topics/decisions</li><li>• Emphasize on regional level capabilities in support of real-world operations/contingencies</li></ul>		

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>			Date <b>May 2009</b>	
<b>APPROPRIATION/BUDGET ACTIVITY</b>		<b>R-1 NOMENCLATURE</b>		
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>		<b>0603898C BMD Joint Warfighter Support</b>		
	FY 2008	FY 2009	FY 2010	FY 2011
BMDS Logistics Support and Integrated Logistics Support (ILS) Development	167	967	0	
RDT&E Articles (Quantity)	0	0	0	
<p>FY08 Program Accomplishments:</p> <ul style="list-style-type: none"> <li>• Updated BMDS-wide Integrated Logistics Support Plans and Sustainment Directive.</li> <li>• Developed and Beta-tested the BMDS Operational Readiness Reporting System as part of the operational readiness automated tool development process.</li> <li>• Chaired and sponsored periodic (planned monthly) BMDS Integrated Logistics Support Team meetings for Action Officer-level interface and exchange.</li> <li>• Executed the annual Joint Integrated Logistics Support Management Team Conference for Senior Mentor and Action Officer-level interface.</li> <li>• Shared lessons learned by Elements, Combatant Commands and Services and identification of logistics issues, and recommended solutions by BMDS stakeholders.</li> </ul> <p>FY09 Planned Program:</p> <ul style="list-style-type: none"> <li>• Continue to update BMDS-wide Integrated Logistics Support Plans and Sustainment Directive.</li> <li>• Continue to develop and Beta-test the BMDS Operational Readiness Reporting System as part of the operational readiness automated tool development process.</li> <li>• Chair and sponsor periodic (planned monthly) BMDS Integrated Logistics Support Team meetings for Action Officer-level interface and exchange.</li> <li>• Execute the annual Joint Integrated Logistics Support Management Team Conference for Senior Mentor and Action Officer-level interface.</li> <li>• Share lessons learned by Elements, Combatant Commands and Services and identification of logistics issues, and recommended solutions by BMDS stakeholders.</li> </ul> <p>FY10 Planned Program:</p> <ul style="list-style-type: none"> <li>• None</li> </ul>				

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>		<b>Date May 2009</b>		
<b>APPROPRIATION/BUDGET ACTIVITY</b>		<b>R-1 NOMENCLATURE</b>		
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>		<b>0603898C BMD Joint Warfighter Support</b>		

	FY 2008	FY 2009	FY 2010	FY 2011
BMDS Training and Education	5,610	7,245	7,373	
RDT&E Articles (Quantity)	0	0	0	

**FY08 Program Accomplishments:**

- Opened the Joint BMDS Training and Education Center Campus.
- Hosted Integrated Ballistic Missile Defense Training Working Groups.
- Developed a 3 week TRADOC compliant the Army Navy/Transportable Radar Surveillance (AN/TPY-2) Radar Manager Course and presented to applicable Component Commands.

**FY09 Planned Program:**

- Operate the Joint BMDS Training and Education Center Campus.
- Host Integrated Ballistic Missile Defense Training Working Groups.
- Continue to develop and provide a TRADOC Compliant ANTPY-2 Radar Manager Course to applicable Component Commands.

**FY10 Planned Program:**

- Continue to operate the Joint BMDS Training and Education Center Campus.
- Continue to host Integrated Ballistic Missile Defense Training Working Groups.
- Develop Combatant Command training courses

	FY 2008	FY 2009	FY 2010	FY 2011
Warfighter Interface Management	14,293	17,569	8,884	
RDT&E Articles (Quantity)	0	0	0	

**FY08 Program Accomplishments:**

Project: YX03 Joint Warfighter

MDA Exhibit R-2A (PE 0603898C)

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>	Date <b>May 2009</b>
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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>
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- Completed transition of four divisions from the National Capital Region to the Missile Defense Integration Operations Center in Colorado Springs, including the build-out and re-fitting of existing office spaces to accommodate personnel duties with the Warfighter Support Center
- Completed build-out of the expanded Joint BMDS Training and Education Center
- Completed build-out of the new Wargame and Exercise Support Center
- Began build-out work for the new Operation Support Center in Colorado Springs, Colorado
- Supported real-world operations/contingency training requirements (e.g. BURNT FROST satellite shoot down, FAST SHIELD North Korean TD-2 response planning)

**FY09 Planned Program:**

- Provide support for Component Command participants to attend numerous missile defense exercises and wargames. Support travel requirements of the Warfighter Support Center Civilian and Military staff, to attend various exercises, wargames, planning conferences and technology conferences. Provide Contractor Technical Support to the Directorate for Warfighter Interface
- Supported real-world operations/contingency training requirements (e.g., deployment of the AN/TPY-2 radar to Israel)

**FY10 Planned Program:**

- Continue to provide support for Component Command participants to attend numerous missile defense exercises and wargames. Support travel requirements of the Directorate for Warfighter Interface Civilian and Military staff, to attend various exercises, wargames, planning conferences and technology conferences. Provide Contractor Technical Services Support to the Directorate for Warfighter Interface

	FY 2008	FY 2009	FY 2010	FY 2011
Ballistic Missile Defense System Manager	0	5,212	0	
RDT&E Articles (Quantity)	0	0	0	

**NOTE:** In FY08 funding for BMD/System Manager (\$4,834) resided in the Ground-Based Missile Defense Program Element (PE 0603882C).

**FY09 Planned Program:**

Project: YX03 Joint Warfighter

MDA Exhibit R-2A (PE 0603898C)

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Missile Defense Agency (MDA) Exhibit R-2A RDT&E Project Justification		Date May 2009
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support	
<ul style="list-style-type: none"><li>Continue integration of all Doctrine, Organization, Training, Leadership, Personnel, and Facilities activities required to field an AN/TPY-2 (Forward Based Radar) in Japan; posture the Sea-based X-band Radar for successful fielding in the absence of a lead service; maintain Ground Based Midcourse Defense readiness, and serve as user representative for Command and Control, Battle Management, and Communications/Global Engagement Manager on behalf of Strategic Command's Joint Functional Component Command for Integrated Missile Defense.</li></ul> <p>FY10 Planned Program:</p> <ul style="list-style-type: none"><li>NONE</li></ul>		

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<b>Missile Defense Agency (MDA) Exhibit R-2A RDT&amp;E Project Justification</b>							Date <b>May 2009</b>		
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<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 NOMENCLATURE</b>					
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>				<b>0603898C BMD Joint Warfighter Support</b>					

**C. Other Program Funding Summary**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Total Cost
PE 0603175C Ballistic Missile Defense Technology	106,437	119,308	109,760						-
PE 0603881C Ballistic Missile Defense Terminal Defense Segment	1,034,478	956,686	719,465						-
PE 0603882C Ballistic Missile Defense Midcourse Defense Segment	2,198,664	1,507,481	982,922						-
PE 0603883C Ballistic Missile Defense Boost Defense Segment	503,475	400,751	186,697						-
PE 0603884C Ballistic Missile Defense Sensors	574,231	777,693	636,856						-
PE 0603886C Ballistic Missile Defense System Interceptors	330,874	385,493	0						-
PE 0603888C Ballistic Missile Defense Test and Targets	619,137	919,956	966,752						-
PE 0603890C Ballistic Missile Defense Enabling Programs	416,937	402,778	369,145						-
PE 0603891C Special Programs – MDA	193,157	175,712	301,566						-
PE 0603892C Ballistic Missile Defense Aegis	1,126,337	1,113,655	1,690,758						-
PE 0603893C Space Tracking & Surveillance System	226,499	208,923	180,000						-
PE 0603894C Multiple Kill Vehicle	223,084	283,481	0						-
PE 0603895C BMD System Space Program	16,237	24,686	12,549						-
PE 0603896C BMD C2BMC	439,997	288,287	340,014						-
PE 0603897C BMD Hercules	51,387	55,764	48,186						-
PE 0603904C Missile Defense Integration & Operations Center (MDIOC)	77,102	106,040	86,949						-
PE 0603906C Regarding Trench	1,945	2,968	6,164						-
PE 0603907C Sea Based X-Band Radar (SBX)	155,244	146,895	174,576						-
PE 0603908C BMD Europ Intercep Site	0	362,007	0						-
PE 0603909C BMD Europ Midcourse Radar	0	76,537	0						-
PE 0603911C BMD European Capability	0	0	50,504						-
PE 0603912C BMD European Comm Support	0	27,008	0						-
PE 0603913C Israeli Cooperative	0	0	119,634						-
PE 0605502C Small Business Innovative Research BMDO	137,409	0	0						-
PE 0901585C Pentagon Reservation	5,971	19,667	19,709						-
PE 0901598C Management Headquarters – MDA	83,907	81,174	57,403						-

*Note: The Ballistic Missile Defense System (BMDS) is an integrated, interoperable, global defense system. The programs which comprise the BMDS are interdependent.*

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Missile Defense Agency (MDA) Exhibit R-2A RDT&E Project Justification		Date May 2009
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support	
<b><u>D. Acquisition Strategy</u></b>  The Directorate for Warfighter Interface will continue to follow the MDA's capability-based acquisition strategy that emphasizes assessment, spiral-development testing and evolutionary acquisition. The Warfighter Support Center accomplishes this by development and vetting of Operational Concepts through the Warfighters and the Services utilizing seminars, workshops, table top exercises, wargames and simulation exercises that also support Military Utility Assessment updates.		

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Missile Defense Agency (MDA) Exhibit R-3 RDT&E Project Cost Analysis							Date May 2009			
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)					R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support					
<b>I. Product Development Cost ( \$ in Thousands )</b>										
Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
<b>Exercises, Wargames &amp; Geographic Combatant Commander Support</b>										
Exercises & Wargames	C/CPAF	MDIOC/TH/AB/ SMDC/ Colorado Springs, CO/Huntsville, AL	14,953	28,150	1/4Q	32,532	1/4Q			75,635
Geographic Combatant Commander Support	TM	COCOMS/ Various	335	469	1/4Q	68	1/4Q			872
MDA	Various	MDA/MDIOC/ Colorado Springs	0	0	N/A	1,000	4Q			1,000
<b>Concepts, Plans &amp; Joint Staff/Service/COCOM Integration</b>										
Concepts, Plans and Integration Support	TM	MDIOC/ Colorado Springs, CO	293	294	1/2Q	394	1/2Q			981
Concepts, Plans and Integration Studies	C/CPAF	MDIOC/ Colorado Springs, CO	1,230	1,356	1/2Q	596	1/2Q			3,182
Integrated Air & Missile Defense Future Concepts Studies	C/CPFF	MDIOC/ Colorado Springs, CO / Arlington, VA	70	70	2/3Q	0	4Q			140
Joint Staff/Service Integration Cell Studies and Analysis	FFP	Arlington, VA	779	1,000	2/3Q	1,000	2/3Q			2,779

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<b>Missile Defense Agency (MDA) Exhibit R-3 RDT&amp;E Project Cost Analysis</b>	Date <b>May 2009</b>
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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>
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Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
<b>BMDS Logistics Support and Integrated Logistics Support (ILS) Development</b>										
BMDS Logistics Development Studies & Analysis	C/CPAF	MDA/ Washington, D.C.	167	560	1/3Q	0	N/A			727
BMDS Logistics - Operational Readiness Reporting System	TM	MDIOC/ Colorado Springs, CO	0	407	1/3Q	0	N/A			407
<b>BMDS Training and Education</b>										
BMDS Training & Education Center	C/CPAF	MDIOC / Colorado Springs, CO	5,610	5,096	1Q	5,813	1Q			16,519
MDST	Various	MDIOC/ Colorado Springs, CO	0	2,149	1/2Q	1,560	1/2Q			3,709
Subtotal Product Development			23,437	39,551		42,963				105,951

**Remarks**

The FY10 MDST budget supports MDA RDT&E and BMD developmental requirements but does not fund recurring service training/missile warning exercise requirements. DWO plans to support on a fee for service basis.

**II. Support Costs Cost ( \$ in Thousands )**

Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
<b>Warfighter Interface Management</b>										

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<b>Missile Defense Agency (MDA) Exhibit R-3 RDT&amp;E Project Cost Analysis</b>	Date <b>May 2009</b>
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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>
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Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
Warfighter Support Center & Operations Support Center Facilities	C/CPFF	MDIOC / Colorado Springs, CO	259	260	1/4Q	0	N/A			519
Operations Support Center Build-Out	FPI	MDIOC/ Colorado Springs, CO	1,700	0	N/A	0	N/A			1,700
<b>Subtotal Support Costs</b>			<b>1,959</b>	<b>260</b>		<b>0</b>				<b>2,219</b>

**Remarks**

**III. Test and Evaluation Cost ( \$ in Thousands )**

Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
<b>Subtotal Test and Evaluation</b>										

**Remarks**

**IV. Management Services Cost ( \$ in Thousands )**

Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/ Oblg Date	FY 2010 Cost	FY 2010 Award/ Oblg Date	FY 2011 Cost	FY 2011 Award/ Oblg Date	Total Cost
<b>Warfighter Interface Management</b>										
DW Civilian Personnel Salaries	TM	Colorado Springs, CO/ Arlington, VA / Huntsville, AL	1,630	2,501	1/4Q	2,439	1/4Q			6,570

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Missile Defense Agency (MDA) Exhibit R-3 RDT&E Project Cost Analysis							Date May 2009			
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)					R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support					
Cost Categories:	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2009 Cost	FY 2009 Award/Oblg Date	FY 2010 Cost	FY 2010 Award/Oblg Date	FY 2011 Cost	FY 2011 Award/Oblg Date	Total Cost
DW Technical Support Contractors	C/CPFF	Various/ Arlington, VA / Huntsville, AL/Colorado	9,750	13,838	1/3Q	5,660	1/3Q			29,248
DW Civilian & Military Staff Travel	TM	Arlington, VA / Huntsville, AL/Colorado	954	866	1/4Q	675	1/4Q			2,495
Operations Support Matrix Management	TM	MDIOC/ Colorado Springs, CO	0	104	1/2Q	110	1/2Q			214
<b>Ballistic Missile Defense System Manager</b>										
Ft. Bliss Admin & Mgt	C/TM	Fort Bliss	0	916	1/3Q	0	N/A			916
BMD/SM Operations & Integration	C/TM	Huntsville, AL	0	1,548	1/3Q	0	N/A			1,548
BMD Element & Capability Deployment	C/TM	Huntsville, AL	0	423	1/3Q	0	N/A			423
C2BMC System Mgr Support	C/TM	Huntsville, AL	0	634	1/3Q	0	N/A			634
BMDS Readiness Support	C/TM	Huntsville, AL	0	634	1/3Q	0	N/A			634
BMDS Strategic Operations	C/TM	Huntsville, AL	0	423	1/3Q	0	N/A			423
BMD Emerging Systems Support	C/TM	Huntsville, AL	0	634	1/3Q	0	N/A			634
Subtotal Management Services			12,334	22,521		8,884				43,739
<b>Remarks</b>										
Project Total Cost			37,730	62,332		51,847				151,909
<b>Remarks</b>										

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<b>Missile Defense Agency (MDA) Exhibit R-4 RDT&amp;E Schedule Profile</b>	Date <b>May 2009</b>
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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>
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Fiscal Year	2008				2009				2010				2011				2012				2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Operation &amp; Sustainment</b>																																
VIGILANT SHIELD Exercise Series	▲				▲				△																							
Global Lightning Exercise Series	▲				▲				△																							
ASSURED RESPONSE Exercise Series	▲		▲				△			△		△																				
TERMINAL FURY Exercise Series		▲					△				△																					
BMDS Training Center Initial Operating Capability		▲																														
Complete Integration of C2BMC and BTEC		▲																														
BMDS Joint Integrated Logistics Support Mgt Team Conference			▲				△				△																					
ARDENT SENTRY Exercise Series			▲				△				△																					
AUSTERE CHALLENGE Exercise Series			▲				△				△																					
EAGLE RESOLVE Exercise Series			▲				△				△																					
KEEN EDGE Exercise Series			▲	▲		▲				△																						
NIMBLE TITAN Wargame Series			▲								△																					
GLOBAL STORM Exercise Series			▲																													

**Legend**

<ul style="list-style-type: none"> <li>▲ Significant Event (complete)</li> <li>★ Milestone Decision (complete)</li> <li>◆ Element Test (complete)</li> <li>▽ System Level Test (complete)</li> <li>▲ Complete Activity</li> </ul>	<ul style="list-style-type: none"> <li>▲ Significant Event (planned)</li> <li>★ Milestone Decision (planned)</li> <li>◆ Element Test (planned)</li> <li>▽ System Level Test (planned)</li> <li>△ Planned Activity</li> </ul>
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**Missile Defense Agency (MDA) Exhibit R-4RDT&ESchedule Profile**

Date  
**May 2009**

**APPROPRIATION/BUDGET ACTIVITY**

**R-1 NOMENCLATURE**

**RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)**

**0603898C BMD Joint Warfighter Support**

Fiscal Year	2008				2009				2010				2011				2012				2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Operation &amp; Sustainment</b>																																
GLOBAL THUNDER Exercise Series				▲				△				△																				
BMDS Logistics Support Contingency Plan Update			▲					△				△																				
JOINT PROJECT ALLIANCE / WINDOW (JPOA/W)			▲																													
FUTURE EPOCH Wargame Series				▲																												
BMDS Training Center Full Operations Capability								△																								
JUNIPER COBRA Exercise Series								△	△	△	△	△																				

**Legend**

▲	Significant Event (complete)	▲	Significant Event (planned)
★	Milestone Decision (complete)	★	Milestone Decision (planned)
◆	Element Test (complete)	◆	Element Test (planned)
▽	System Level Test (complete)	▽	System Level Test (planned)
▲—▲	Complete Activity	△—△	Planned Activity

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Missile Defense Agency (MDA) Exhibit R-4A Schedule Detail				Date May 2009				
APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)				R-1 NOMENCLATURE 0603898C BMD Joint Warfighter Support				
Schedule Profile	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
<b>Operation &amp; Sustainment</b>								
VIGILANT SHIELD Exercise Series	1Q	1Q	1Q					
Global Lightning Exercise Series	1Q	1Q	1Q					
ASSURED RESPONSE Exercise Series	1Q,3Q	3Q	2Q,4Q					
TERMINAL FURY Exercise Series	2Q	3Q	3Q					
BMDS Training Center Initial Operating Capability	2Q							
Complete Integration of C2BMC and BTEC	2Q							
BMDS Joint Integrated Logistics Support Mgt Team Conference	3Q	3Q	3Q					
ARDENT SENTRY Exercise Series	3Q	3Q	3Q					
AUSTERE CHALLENGE Exercise Series	3Q	3Q	3Q					
EAGLE RESOLVE Exercise Series	3Q	3Q	3Q					
KEEN EDGE Exercise Series	3Q,4Q	2Q	2Q					
NIMBLE TITAN Wargame Series	3Q		3Q					
GLOBAL STORM Exercise Series	3Q		3Q					
GLOBAL THUNDER Exercise Series	4Q	3Q	3Q					
BMDS Logistics Support Contingency Plan Update	3Q	3Q	3Q					
JOINT PROJECT ALLIANCE / WINDOW (JPOA/W)	4Q							
FUTURE EPOCH Wargame Series		1Q						
BMDS Training Center Full Operations Capability		2Q						
JUNIPER COBRA Exercise Series		2Q-4Q	2Q					

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<b>Missile Defense Agency (MDA) Exhibit R-4A Schedule Detail</b>						Date <b>May 2009</b>		
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<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 NOMENCLATURE</b>				
<b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>				<b>0603898C BMD Joint Warfighter Support</b>				

COST (\$ in Thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
ZX40 Program-Wide Support	2,607	2,017	2,583					
RDT&E Articles Qty	0	0	0					

**A. Mission Description and Budget Item Justification**

Program-Wide Support provides funding for common non-headquarters support functions across the entire program. Includes costs for both government civilians performing these functions, as well as outside services and support contractors that augment government staff in these areas. Other costs included provide facility capabilities for MDA Executing Agent locations, such as physical and technical security, legal services, travel and training, office and equipment leases, utilities and communications, supplies and maintenance, and similar operating expenses. Also includes funding for charges on canceled appropriations in accordance with Public Law 101-510, legal settlements, and foreign currency fluctuations on a limited number of foreign contracts.

**B. Accomplishments/Planned Program**

	FY 2008	FY 2009	FY 2010	FY 2011
Civilian Salaries and Support	2,607	2,017	2,583	
RDT&E Articles (Quantity)	0	0	0	

See Section A: Mission Description and Budget Item Justification

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<b>Missile Defense Agency (MDA) Exhibit R-4A Schedule Detail</b>	Date <b>May 2009</b>
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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>R-1 NOMENCLATURE</b> <b>0603898C BMD Joint Warfighter Support</b>
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**C. Other Program Funding Summary**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Total Cost
PE 0603175C Ballistic Missile Defense Technology	106,437	119,308	109,760						-
PE 0603881C Ballistic Missile Defense Terminal Defense Segment	1,034,478	956,686	719,465						-
PE 0603882C Ballistic Missile Defense Midcourse Defense Segment	2,198,664	1,507,481	982,922						-
PE 0603883C Ballistic Missile Defense Boost Defense Segment	503,475	400,751	186,697						-
PE 0603884C Ballistic Missile Defense Sensors	574,231	777,693	636,856						-
PE 0603886C Ballistic Missile Defense System Interceptors	330,874	385,493	0						-
PE 0603888C Ballistic Missile Defense Test and Targets	619,137	919,956	966,752						-
PE 0603890C Ballistic Missile Defense Enabling Programs	416,937	402,778	369,145						-
PE 0603891C Special Programs – MDA	193,157	175,712	301,566						-
PE 0603892C Ballistic Missile Defense Aegis	1,126,337	1,113,655	1,690,758						-
PE 0603893C Space Tracking & Surveillance System	226,499	208,923	180,000						-
PE 0603894C Multiple Kill Vehicle	223,084	283,481	0						-
PE 0603895C BMD System Space Program	16,237	24,686	12,549						-
PE 0603896C BMD C2BMC	439,997	288,287	340,014						-
PE 0603897C BMD Hercules	51,387	55,764	48,186						-
PE 0603904C Missile Defense Integration & Operations Center (MDIOC)	77,102	106,040	86,949						-
PE 0603906C Regarding Trench	1,945	2,968	6,164						-
PE 0603907C Sea Based X-Band Radar (SBX)	155,244	146,895	174,576						-
PE 0603908C BMD Europ Intercep Site	0	362,007	0						-
PE 0603909C BMD Europ Midcourse Radar	0	76,537	0						-
PE 0603911C BMD European Capability	0	0	50,504						-
PE 0603912C BMD European Comm Support	0	27,008	0						-
PE 0603913C Israeli Cooperative	0	0	119,634						-
PE 0605502C Small Business Innovative Research BMDO	137,409	0	0						-
PE 0901585C Pentagon Reservation	5,971	19,667	19,709						-
PE 0901598C Management Headquarters – MDA	83,907	81,174	57,403						-

*Note: The Ballistic Missile Defense System is an integrated, interoperable, global defense system. The programs which comprise the Ballistic Missile Defense System are interdependent.*