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Missile Defense Agency (MDA) Exhibit R-2 RDT&E Budget Item Justification	Date May 2009
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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle
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COST (\$ in Thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Total PE Cost	223,084	283,481	0					
WX15 Multiple Kill Vehicles (MKV) Capability Development	222,560	273,178	0					
ZX40 Program-Wide Support	524	10,303	0					

The content in FY08-15 project WX15 is a continuation of the efforts reported in FY07 in project 0515 and was explained in that project in PB09. The department is terminating the Multiple Kill Vehicle program in FY10. The agency will conduct an orderly drawdown of the program using FY09 funds.

A. Mission Description and Budget Item Justification

The Ballistic Missile Defense System needs volume kill capability to respond to evolving enemy threats. During flight, the enemy can disguise their warhead or deploy decoys and other debris around their warhead. These disguises make it harder for our sensors to determine which object is the actual lethal warhead. Today, we may have to launch multiple interceptors, each with a single kill vehicle, to ensure we hit the lethal warhead. Our multiple kill vehicle payloads will allow a single interceptor to deliver several kill vehicles to attack a multitude of threat objects.

A.1 System Element Description

We were developing kill vehicles for ground-based midcourse interceptors and kinetic energy interceptors. These kill vehicles use information from the system to identify, seek out, and destroy lethal objects within a threat cluster. While in flight, the kill vehicles receive and transmit data from the ground to ensure they hit their designated targets.

A.2 System Element Budget Justification and Contribution to the Ballistic Missile Defense System (BMDS)

With the multiple kill vehicles, we can destroy all the objects with one interceptor. This saves interceptor inventory and reduces infrastructure costs.

A.3 Major System Element Goals

Our top payload maturity risks are in propulsion, engagement management, coordinated attack, and the seeker. Our top programmatic risks are in achieving commonality, reducing cost, and proving we are ready for testing, production, and fielding.

Our knowledge points demonstrate and validate confidence in the payloads':

- Major subsystems capabilities
- Engagement management performance

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- Seeker algorithms
- Readiness in hardware-in-the-loop test facilities and flight testing
- Commonality among kill vehicles
- Production cost commitments, rates, and processes
- Procurement and fielding

A.4 Major Events Schedule and Description

Major Event	Project	Timeframe	Description
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Other

Program Milestones

Engineering Reviews	WX15	3Q FY 2009	<ul style="list-style-type: none"> • • • Identify, conduct and complete system trades to establish payload requirements, and integration requirements across midcourse interceptor elements
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B. Program Change Summary	FY 2008	FY 2009	FY 2010	FY 2011
Previous President's Budget (FY2009 PB)	229,943	354,455	488,294	
Current President's Budget (FY2010 PB)	223,084	283,481	0	
Total Adjustments	-6,859	-70,974	-488,294	
Congressional Program Reductions	0	-70,974	0	
Congressional Rescissions	0	0	0	
Total Congressional Increases	0	0	0	
Total Reprogrammings	-3,091	0	0	
SBIR/STTR Transfer	-3,768	0	0	
Adjustments to Budget Years	0	0	-488,294	

FY08 decrease of \$6.859 million includes SBIR/STTR transfer and MDA reprogrammings.

FY09 decrease of \$70.000 million for Congressional adjustments. \$974 thousand decrease for MDA programmatic changes to support program requirements

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APPROPRIATION/BUDGET ACTIVITY				R-1 NOMENCLATURE				
RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)				0603894C Multiple Kill Vehicle				

COST (\$ in Thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
WX15 Multiple Kill Vehicles (MKV) Capability Development	222,560	273,178	0					
RDT&E Articles Qty	1	2	0					

Note:

A. Mission Description and Budget Item Justification

We focused commonality standards, modular approaches, and proven technologies where sensible and beneficial to reduce risk for integrating kill vehicles across all interceptors. Our master test plans progress from digital simulation to ground test to system flight test in representative operational environments.

B. Accomplishments/Planned Program

	FY 2008	FY 2009	FY 2010	FY 2011
Element Payload Development	142,230	150,250	0	
RDT&E Articles (Quantity)	1	2	0	

ELEMENT PAYLOAD DEVELOPMENT

We focused our early pathfinder testing on the higher risk elements of our kill vehicle concepts (engagement management, sensors, and propulsion systems).

ENGAGEMENT MANAGEMENT: Proving we can engage multiple targets is critical to our success and contributes to our knowledge points. Using digital simulations, we can test our ability to manage the engagement.

SEEKERS: Seeker testing establishes our confidence we can acquire and track threat objects early enough to intercept. We are installing the seekers in an airplane to captive carry test them against targets of opportunity in FY09.

PROPULSION: Propulsion testing establishes our confidence we can maneuver to hit the target. We are testing propulsion components through a series of ground tests.

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FY08 Accomplishments		
<ul style="list-style-type: none">· RDT&E Articles· Hover Test Vehicle· Lockheed Martin Accomplishments· Integrated and tested engagement management algorithms· Built two mission computers· Built the hover test vehicle· Integrated hover test equipment· Tested carrier vehicle divert thrusters· Tested seeker gimbal system· Calibrated carrier vehicle telescope		
FY09 Planned Program		
<ul style="list-style-type: none">· RDT&E Articles· 2 Carrier Vehicle Seekers· Suppliers· Produce multiple lots of focal plane arrays· Test kill vehicle divert thrusters· Test kill vehicle solid propulsion· Lockheed Martin Planned Program· Hover test· Build two seekers· Test seeker on an airplane captive carry· Build three mission computers· Raytheon Planned Program· Develop engagement management test bed· Conduct an orderly drawdown of the MKV program using FY09 funds.		

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APPROPRIATION/BUDGET ACTIVITY		R-1 NOMENCLATURE		
RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)		0603894C Multiple Kill Vehicle		
	FY 2008	FY 2009	FY 2010	FY 2011
Element System Engineering	61,495	101,022	0	
RDT&E Articles (Quantity)	0	0	0	
<p>We will review the payload system requirements in FY09.</p> <p>We will develop and use modeling and simulation to validate volume kill of complex threats and help us engage with the warfighter in development of concept of operations</p> <p>FY08 Accomplishments</p> <ul style="list-style-type: none"> · Baselined booster configurations for Ground-Based and Kinetic Energy interceptors · Baselined payload concept · Baselined weapon system components and interfaces · Integrated warfighter in system engineering and development of concept of operations · Delivered modeling and simulation products for integrating kill vehicle and weapon system models <p>FY09 Planned Program</p> <ul style="list-style-type: none"> · Update Adversary Data Package · Update scenario data · Perform Future Epoch warfighter wargame · Complete Payload System Requirements Reviews · Verify engineering models · Update and execute Risk Management Plan · Deliver payload capability specification · Deliver payload external Interface Requirement Specification. 				

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- Develop high fidelity digital simulation
- Conduct an orderly drawdown of the MKV program using FY09 funds.

	FY 2008	FY 2009	FY 2010	FY 2011
Element Test and Evaluation	11,446	14,511	0	
RDT&E Articles (Quantity)	0	0	0	

Element Test and Evaluation includes planning, execution, and evaluation of kill vehicle ground tests.

FY08 Accomplishments

- Defined kill vehicle test approach
- Lockheed-Martin delivered Draft Master Test Plan

FY09 Planned Program

- Prepare BMDS Kill Vehicle Master Test Plan
- Conduct an orderly drawdown of the MKV program using FY09 funds.

	FY 2008	FY 2009	FY 2010	FY 2011
Element Program Operations	7,389	7,395	0	
RDT&E Articles (Quantity)	0	0	0	

Element Program Operations is leading an integrated team approach using resources from government, industry, and academia. The government team works with the Prime Contractors and Agency weapon system elements to manage and execute our systems engineering efforts for defining requirements, conducting trades, and developing products. The team manages cost, schedule, and technical performance and conducts periodic reviews to assess the degree of completion of technical and programmatic efforts.

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FY08-FY09 Accomplishments		
<ul style="list-style-type: none">· Provide government and contractor program staff for the overall management of the program; including: system engineering, testing, acquisition management, business management, financial management, contract administration, cost and schedule performance assessment, cost estimation and analysis, data management, quality assurance, and mission assurance.· Conduct an orderly drawdown of the MKV program using FY09 funds.		

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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 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 0603898C BMD Joint Warfighter Support	45,400	69,743	60,921						-
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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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle	
<u>D. Acquisition Strategy</u> Because multiple kill is a new capability for the Ballistic Missile Defense System, we believe there is inherently some development risk. We identified a series of knowledge points to burn down this development risk. Our acquisition strategy used competitive prototyping via a parallel path strategy with two providers; Lockheed Martin and Raytheon Missile Systems. In this approach, we incrementally contracted and funded each contractor based on their progress in proving out their capability offerings.		

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Missile Defense Agency (MDA) Exhibit R-3 RDT&E Project Cost Analysis	Date May 2009
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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle
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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
Element Payload Development										
Payload Development	CPAF	Lockheed Martin/ Sunnyvale, CA	204,290	93,380	1Q	0	N/A			297,670
Payload Development	CPAF	Raytheon/ Tucson, AZ	0	13,881	1Q	0	N/A			13,881
Element System Engineering										
System Engineering	CPAF	Lockheed Martin/ Sunnyvale, CA	84,482	19,545	1Q	0	N/A			104,027
System Engineering	CPAF	Raytheon/ Tucson, AZ	0	49,978	1Q	0	N/A			49,978
Element Test and Evaluation										
System Test and Evaluation	CPAF	Lockheed Martin/ Sunnyvale, CA	0	0	N/A	0	N/A			
System Test and Evaluation	CPAF	Raytheon/ Tucson, AZ	0	0	N/A	0	N/A			
Subtotal Product Development			288,772	176,784		0				465,556

Remarks

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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle
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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
Element Payload Development										
Payload Development Labs	MIPR	DRS (NVL)/ Ft. Belvoir, VA	6,075	1,281	1Q	0	N/A			7,356
Payload Development Labs	MIPR	RVS (NVL)/ Ft. Belvoir, VA	7,092	3,245	1Q	0	N/A			10,337
Payload Development FFRDC	FFRDC	Space Dynamics Laboratory/ Logan, UT	3,084	2,149	1Q	0	N/A			5,233
Payload Development	CPAF	Aerojet/ Sacramento, CA	2,850	14,500	1Q	0	N/A			17,350
Payload Development	CPAF	ATK/ Elkton, MD	922	5,500	1Q	0	N/A			6,422
Payload Development	CPAF	Pratt Whitney/Rocketd yne/ Canoga Park, CA	2,170	10,000	1Q	0	N/A			12,170
Lithium Battery Development	MIPR	LithChem/ Folcroft, PA	2,480	0	N/A	0	N/A			2,480
Payload Development	MIPR	ITT/ Huntsville, AL	2,092	1,425	1Q	0	N/A			3,517
Payload Development	MIPR	Sandia/ Albuquerque, NM	1,824	1,250	1Q	0	N/A			3,074

Project: WX15 Multiple Kill Vehicles (MKV) Capability Development MDA Exhibit R-3 (PE 0603894C)

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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 0603894C Multiple Kill Vehicle					
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
Payload Development	Various	Various/ Various	5,565	3,639	1Q	0	N/A			9,204
Element System Engineering										
Systems Engineering SETA	CPFF	Sparta/ Arlington, VA	10,891	8,492	1Q	0	N/A			19,383
Systems Engineering SETA	CPFF	Computer Sciences Corp/ Arlington, VA	8,241	5,664	1Q	0	N/A			13,905
Systems Engineering FFRDC	FFRDC	MIT Lincoln Lab/ Lexington, MA	9,760	5,126	1Q	0	N/A			14,886
Systems Engineering FFRDC	FFRDC	JHU Applied Physics Laboratory/ Laurel, MD	7,318	4,500	1Q	0	N/A			11,818
Systems Engineering	CPAF	Boeing/ Huntsville, AL	9,911	0	1Q	0	N/A			9,911
Systems Engineering	Various	Various/ Various	2,531	4,828	1Q	0	N/A			7,359
Common Threat	Various	Various/ Various	0	2,889	1Q	0	N/A			2,889
Subtotal Support Costs			82,806	74,488		0				157,294
Remarks										

Project: WX15 Multiple Kill Vehicles (MKV) Capability Development

MDA Exhibit R-3 (PE 0603894C)

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Missile Defense Agency (MDA) Exhibit R-3 RDT&E Project Cost Analysis	Date May 2009
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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle
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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
Element Test and Evaluation										
System Test and Evaluation Facilities	MIPR	NHTF/WASP/K HILS/AEDC 10V/7V/ Edwards AFB, CA, Arnold AFB, TN	10,664	6,962	1Q	0	N/A			17,626
System Test and Evaluation SETA	CPFF	Sparta/ Arlington, VA	4,331	3,693	1Q	0	N/A			8,024
System Test and Evaluation	Various	Various	0	856	1Q	0	N/A			856
System Test and Evaluation	CPAF	Boeing/ Huntsville, AL	0	3,000	1Q	0	N/A			3,000
Subtotal Test and Evaluation			14,995	14,511		0				29,506

Remarks

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IV. Management Services Cost (\$ in Thousands)

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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)					R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle					
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
Element Program Operations										
Program Operations - Gov't Personnel and Travel		MDA/ Arlington, VA/Huntsville, AL	7,228	2,872	1Q	0	N/A			10,100
Program Operations SETA	CPFF	Paradigm Technologies, Inc/ Arlington, VA	1,965	1,650	1Q	0	N/A			3,615
Program Operations	Various	Various/ Arlington, VA/Huntsville, AL	4,825	2,873	1Q	0	N/A			7,698
Infrastructure Support	Various	Various/ Colorado Springs, CO	741	0	N/A	0	N/A			741
Subtotal Management Services			14,759	7,395		0				22,154
Remarks										
Project Total Cost			401,332	273,178		0				674,510
Remarks										

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Missile Defense Agency (MDA) Exhibit R-4 Schedule Profile	Date May 2009
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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)	R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle
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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
Program Milestones																																
Engagement Management Simulation			▲				▲																									
Engineering Reviews							△																									
Kill Vehicle Divert Thruster Tests			▲																													
Hover Test						▲																										
Calibrate Seekers	▲																															
Algorithm Tests							▲																									
Multiple Lots of Focal Plane Arrays						▲	▲																									
Define and Develop external Interfaces Requirement Specifications							▲																									
Airplane Captive Carry Seeker Testing								△																								

Legend	
▲	Significant Event (complete)
★	Milestone Decision (complete)
◆	Element Test (complete)
▼	System Level Test (complete)
▲▼	Complete Activity
△	Significant Event (planned)
★	Milestone Decision (planned)
◇	Element Test (planned)
▼	System Level Test (planned)
△▼	Planned Activity

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Missile Defense Agency (MDA) Exhibit R-4A Schedule Detail						Date May 2009		
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APPROPRIATION/BUDGET ACTIVITY RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)				R-1 NOMENCLATURE 0603894C Multiple Kill Vehicle				
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Schedule Profile	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Program Milestones								
Engagement Management Simulation	3Q	3Q						
Engineering Reviews		3Q						
Kill Vehicle Divert Thruster Tests	3Q							
Hover Test		1Q						
Calibrate Seekers	1Q							
Algorithm Tests		3Q						
Cost Analysis Requirements Descriptions	1Q	1Q						
Multiple Lots of Focal Plane Arrays		2Q,3Q						
Define and Develop external Interfaces Requirement Specifications		3Q						
Airplane Captive Carry Seeker Testing		4Q						

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APPROPRIATION/BUDGET ACTIVITY				R-1 NOMENCLATURE				
RDT&E, DW/04 Advanced Component Development and Prototypes (ACD&P)				0603894C Multiple Kill Vehicle				

COST (\$ in Thousands)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
ZX40 Program-Wide Support	524	10,303	0					
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	524	10,303	0	
RDT&E Articles (Quantity)	0	0	0	

See Section A: Mission Description and Budget Item Justification

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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 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 0603898C BMD Joint Warfighter Support	45,400	69,743	60,921						-
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.*