

Fiscal Year 2014 Budget Estimates
Missile Defense Agency (MDA)



April 2013

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**Missile Defense Agency
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2014 Budget Estimates**

**Operation and Maintenance, Defense-Wide Summary (\$ in thousands)
Budget Activity (BA) 1: Operating Forces
Subactivity Group 11A**

	FY 2012 <u>Actual</u>	Price <u>Change</u>	Program <u>Change</u>	FY 2013 <u>Estimate</u>	Price <u>Change</u>	Program <u>Change</u>	FY 2014 <u>Estimate</u>
MDA	201,733	4,226	54,016	259,975	4,940	-8,714	256,201

I. Description of Operations Financed: A. Terminal High Altitude Area Defense (THAAD). As described in the BMDS Transition and Transfer (T2) Annex, as well as the DEPSECDEF Funding Memorandum, the MDA is responsible for the sustainment of the missile defense unique or developmental items and the U.S. Army is responsible for the sustainment of the common items. MDA funding accomplishes the following efforts: Provides field and sustainment level maintenance for all THAAD deployed equipment for missile defense unique equipment only. Provides spares, repair parts, and maintenance capability at the location of the deployed THAAD batteries. Spares and repair parts include the contractor transportation, packaging and handling of Line Replaceable Units (LRUs) and inventory control and storage of repair parts, LRUs, and spares. Provides engineering support for the THAAD missile defense unique equipment. Provides missile transportation and handling from the missile storage location to the site of the THAAD launchers. Updates logistical data information of the Interactive Electronic Technical Manual (IETM) with the most current data and provide software user's guide up-dates and certify each revision of the software. Provides maintenance and upkeep for all THAAD training devices. Provides maintenance support to the missile defense unique equipment in the THAAD Fire Battery, for all New Equipment Training and any replacement training required due to design changes for replacement soldiers. Ensures THAAD assets are properly maintained and the crews are trained and certified to meet Combatant Commanders needs. Beginning in FY 2015, training for THAAD will transition from MDA to the Army.

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I. Description of Operations Financed (cont.)

B. Ballistic Missile Defense System (BMDS) Radars. This funding provides for the Upgraded Early Warning Radar (UEWR)/Cobra Dane Radar Software Sustainment unique to the Missile Defense mission. The Air Force is responsible for the day to day operations and maintenance of the UEWRs and Cobra Dane Radar.

C. Aegis Ballistic Missile Defense (BMD). Aegis BMD funding will support a wide range of activities in support of the SM-3 Blk IA including Vertical Launch System (VLS) canister spares, fleet introduction and support, initial round transportation; re-certification of the SM-3 Blk IA at 4 year mid-life, and round surveillance.

II. Force Structure Summary:

A. Terminal High Altitude Area Defense (THAAD). Army force structure for THAAD is currently set at six batteries with six launchers operated by ninety-nine soldiers and documented on Modified Table of Organization and Equipment (MTOE) number 44693G000. The battery is organized to conduct 120-day deployments (forty-five days of entry operations and seventy-five days of 17-hour/day combat operations). This operational tempo can be increased with appropriate attachments and support. The battery requires support from the Army for communications, security, common supplies, and services. THAAD missile defense unique supplies are routed to a non-theater contractor supply and specialized maintenance chain. To this end, the battery brings with it a twelve-person contractor support team with its own complement of equipment. The contractor team will be

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II. Force Structure Summary (cont.)

documented on an Army Table of Distribution and Allowances (TDA) to facilitate movement into a war zone with the battery. Interceptors are not considered part of battery force structure and are allocated by commanders in accordance with the mission and threat. Batteries will be doctrinally assigned to the theater Army Air and Missile Defense Command. Engagements will be coordinated through the theater Air Operations Center. With the provision of specialized communications and radar software, the battery will be able to communicate directly with the Ballistic Missile Defense System Command and Control Battle Management and Communications (C2BMC) system making it capable of performing surveillance and tracking missions in addition to its normal active defense engagement mission.

The increase in FY 2014 is due to maintaining two additional batteries and the provisioning of the Army Hybrid Cell. MDA functions for the Army Hybrid Cell was funded in FY 2013 with RDT&E and will be funded in FY 2014 with O&M. The Hybrid Cell is composed of MDA and Army personnel providing Doctrine, Training, Leadership, Organization, Materiel, Soldier (DTLOMS) support for the THAAD system. The Hybrid Cell provides technical guidance, financial management, cost and schedule performance analysis, cost estimation and analysis, integration activities, and sub-contract management to ensure effective use of appropriated resources for Program Support Items activity. In FY 2013, THAAD will maintain three batteries and in FY 2014 THAAD will maintain a total of five batteries. MDA is responsible for interoperability and integration efforts into BMDS.

B. Ballistic Missile Defense System (BMDS) Radars. This funding provides for the Upgraded Early Warning Radar (UEWR)/Cobra Dane Radar Software Sustainment unique to the Missile Defense mission. The Air Force is responsible for the day to day operations and Maintenance of the UEWRs and Cobra Dane Radar. The FY 2014 funding provides for the daily operation and sustainment of nine Army Navy/Transportable Radar Surveillance and Control-

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II. Force Structure Summary (cont.)

2 (AN/TPY-2) radars, five forward-based radars (1 U.S., 4 OCONUS), and four Terminal High Altitude Area Defense battery radars (3 U.S., 1 OCONUS). These services are furnished through Centralized Contractor Logistics Support (CLS) contracts. The force structure and operational tempo are documented in the AN/TPY-2 Cost Analysis Requirements Description dated January 2012.

The decrease in FY 2014 is due to the Army assuming responsibility for site support operations (i.e. fuel) and providing support to perform operator/maintainer tasks on forward-based radars as documented in the AN/TPY-2 Forward Based Mode Annex dated 25 January 2012.

C. Aegis Ballistic Missile Defense (BMD). The Aegis Ballistic Missile Defense (Aegis BMD) mission is to deliver an enduring, operationally effective and supportable Ballistic Missile Defense capability to defend the nation, deployed forces, friends and allies. The Aegis BMD element of the BMDS capitalizes upon and evolves from the existing United States Navy Aegis Weapons System (AWS) and Standard Missile (SM) infrastructures. Aegis BMD provides a forward-deployable, mobile capability to detect and track Ballistic Missiles of all ranges, and the ability to destroy Short-Range Ballistic Missiles (SRBM), Medium-Range Ballistic Missiles (MRBM), and Intermediate-Range Ballistic Missiles (IRBM) in the midcourse phase of flight and shorter range missile in terminal phase. Aegis BMD also provides a Long Range Surveillance and Track (LRS&T) capability to the BMDS.

The increase in FY 2014 is due to the availability of 128 SM-3 Blk IA's for deployment aboard U.S. Navy BMD configured ships, an increase of 36 over previous year. Aegis BMD funding will support a wide range of activities in support of the SM-3 Blk IA including VLS Canister Spares, Fleet introduction and support, Initial round transportation; Re-Certification of the SM-3 Blk IA at the 4 year mid-life, and round surveillance.

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II. Force Structure Summary (cont.)

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III. Financial Summary (\$ in thousands)

	<u>FY 2013</u>						<u>FY 2014</u> <u>Estimate</u>
	<u>FY 2012</u> <u>Actual</u>	<u>Budget</u> <u>Request</u>	<u>Congressional Action</u>			<u>Current</u> <u>Estimate</u>	
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
A. <u>BA Subactivities</u>							
1. <u>Operational Support</u>	201,733	259,975				259,975	256,201
Aegis Ballistic Missile Defense (BMD)	0	12,163				12,163	18,444
Ballistic Missile Defense Systems (BMDS)	157,831	192,133				192,133	145,798
Radar Terminal High Altitude Area Defense (THAAD)	43,902	55,679				55,679	91,959
Total	201,733	259,975				259,975	256,201

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III. Financial Summary (\$ in thousands)

B. <u>Reconciliation Summary</u>	Change	Change
	<u>FY 2013/FY 2013</u>	<u>FY 2013/FY 2014</u>
Baseline Funding	259,975	259,975
Congressional Adjustments (Distributed)		
Congressional Adjustments (Undistributed)		
Adjustments to Meet Congressional Intent		
Congressional Adjustments (General Provisions)		
Subtotal Appropriated Amount	259,975	
Fact-of-Life Changes (2013 to 2013 Only)		
Subtotal Baseline Funding	259,975	
Supplemental		
Reprogrammings		
Price Changes		4,940
Functional Transfers		
Program Changes		-8,714
Current Estimate	259,975	256,201
Less: Wartime Supplemental		
Normalized Current Estimate	259,975	

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III. Financial Summary (\$ in thousands)

	Amount	Totals
C. Reconciliation of Increases and Decreases		
FY 2013 President's Budget Request (Amended, if applicable)		259,975
1. Congressional Adjustments		
a. Distributed Adjustments		
b. Undistributed Adjustments		
c. Adjustments to Meet Congressional Intent		
d. General Provisions		
FY 2013 Appropriated Amount		259,975
2. War-Related and Disaster Supplemental Appropriations		
3. Fact-of-Life Changes		
FY 2013 Baseline Funding		259,975
4. Reprogrammings (Requiring 1415 Actions)		
Revised FY 2013 Estimate		259,975
5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings		
FY 2013 Normalized Current Estimate		259,975
6. Price Change		4,940
7. Functional Transfers		
8. Program Increases		41,426
a. Annualization of New FY 2013 Program		
b. One-Time FY 2014 Increases		
c. Program Growth in FY 2014		
1) THAAD program growth is due to the addition of the two batteries & the provisioning of MDA functions for the Army Hybrid Cell, \$7.5M. (FY 2013 baseline \$55,679K, +0 FTE)	35,348	
2) Aegis BMD program growth is due to the increased support of 36 SM-3 Block IA for deployment aboard US Navy BMD configured ships. (FY 2013 baseline \$12,162K, +0 FTE)	6,078	
9. Program Decreases		-50,140

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III. Financial Summary (\$ in thousands)

C. Reconciliation of Increases and Decreases	Amount	Totals
a. Annualization of FY 2013 Program Decreases		
b. One-Time FY 2013 Increases		
c. Program Decreases in FY 2014		
1) BMDS Radar program decrease is due to the Army assuming responsibility for site support operations & sustainment cost in the AN/TPY-2 Forward Based Mode (FY 2013 baseline \$192,133K, +0 FTE)	-50,140	
FY 2014 Budget Request		256,201

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IV. Performance Criteria and Evaluation Summary:

A. Terminal High Altitude Area Defense (THAAD). THAAD utilizes a Performance Clause in the Interim Contractor Support (ICS) contract with LM to award or penalize LM for THAAD weapon system readiness. The assessment of the performance clause is based on evaluation of Battery Operational Readiness and Minimum Capability:

Operational Readiness (OR) is calculated by dividing the number of hours the required components (2 TSG's and 3 Launchers) are available to accomplish the mission during a rating period by the number of hours possible during the rating period. For OR levels greater than 70% and less than or equal to 100%, the contractor is awarded fee on a sliding scale for that portion.

Minimum Capability (MC) is also calculated by dividing the number of hours the required components (1 TSG and 2 Launchers) are available to accomplish the mission during a rating period by the number of hours possible during the rating period. For MC readiness levels less than 100% the contractor is awarded zero fee for that portion.

B. Ballistic Missile Defense System (BMDS) Radars. Upgraded Early Warning Radars (UEWR) and Cobra Dane operations and sustainment are managed by Air Force Space Command and the Air Force Technical Applications Center, respectively. Their contract vehicles have specific incentives to maintain specified operational performance values. The UEWR/Cobra Dane operations and sustainment funds are for MDA developed software support/deficiencies to maintain/enhance the Missile Defense mission for these radars.

For AN/TPY-2 radars, the contractor's performance in operations and sustainment will be measured by the radars' demonstrated operational availability A_o , defined as:

$$A_o = \frac{\text{Total Time} - \text{Non Mission Capable Time}}{\text{Total Time}}$$

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IV. Performance Criteria and Evaluation Summary:

Total Time

“Total time” is defined as 24 hours per day times the number of days in the period of performance of the task order. Performance measurement does not include contractually-defined conditions that are outside the control of the Contractor and are exceptions to A_o downtime. For AN/TPY-2 radars, performance incentives are calculated as follows:

Target A_o = 90%	
$A_o > 90\%$	100% of Performance Incentive Pool
$A_o \geq 70\%, < 90\%$	Actual $A_o\%$ achieved times pool amount
$A_o < 70\%$	Performance Fee = 0%

C. Aegis Ballistic Missile Defense BMD Standard Missile 3 Block IA (SM-3 BLK IA). Performance Objectives are defined in the SM-3 contracts as follows: The performance incentive of the SM-3 Cost Plus/ Incentive Fee/Award Fee (CP/IF/AF) contracts is determined by a formula designed to focus on reduction of overall maintenance cost and efficiency of recertification and the timely return of SM-3s to the fleet.

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<u>V. Personnel Summary</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	Change FY 2012/ FY 2013	Change FY 2013/ FY 2014
<u>Contractor FTEs (Total)</u>	<u>110</u>	<u>605</u>	<u>110</u>	<u>495</u>	<u>-495</u>

The FY 2014 FTE decrease is the result of improved understanding of requirements resulting from MDA's first year of O&M funding in FY 2012.

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VI. OP 32 Line Items as Applicable (Dollars in thousands):

<u>OP 32 Line</u>	FY 2012 <u>Actual</u>	Change FY 2012/FY 2013		FY 2013 <u>Estimate</u>	Change FY 2013/FY 2014		FY 2014 <u>Estimate</u>
		<u>Price</u>	<u>Program</u>		<u>Price</u>	<u>Program</u>	
679 Cost Reimbursable Purchase	2,205	44	1,997	4,246	81	-1,945	2,382
699 Total DWCF Purchases	2,205	44	1,997	4,246	81	-1,945	2,382
920 Supplies & Materials (Non-Fund)	6,483	130	-6,613	0	0	24,537	24,537
922 Equipment Maintenance By Contract	188,365	3,767	39,316	231,448	4,398	-20,321	215,525
930 Other Depot Maintenance (Non-Fund)	0	0	7,917	7,917	150	-8,067	0
937 Locally Purchased Fuel (Non-Fund)	2,996	251	-3,247	0	0	52	52
987 Other Intra-Govt Purch	0	0	0	0	0	3,439	3,439
989 Other Services	1,684	34	14,646	16,364	311	-6,409	10,266
999 Total Other Purchases	199,528	4,182	52,019	255,729	4,859	-6,769	253,819
Total	201,733	4,226	54,016	259,975	4,940	-8,714	256,201