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**Department of Defense  
Fiscal Year (FY) 2014 President's Budget Submission**

April 2013



**Missile Defense Agency**

*Justification Book Volume 2b of 2*

***Procurement, Defense-Wide***

**(Includes O&M and MILCON)**

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Missile Defense Agency • President's Budget Submission FY 2014 • Procurement

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## Introduction & Explanation of Contents

The Department of Defense FY2014 President's Budget RDT&E (Includes Procurement, O&M, and MILCON), Defense-wide Volume 2, Missile Defense Agency (MDA) justification materials consists of two books titled Volume 2a and 2b. Justification documents are provided in the books as listed below.

### Volume 2a

- R-1 Comptroller Exhibit
- MDA FY 2014 Budget Estimate Overview
- MDA Appropriation Summary
- Congressional Reporting Requirements
- Program Assessment Rating Tool (PART) Submission
- Acronyms
- RDT&E Exhibits in BA-03, BA-04, and BA-06

### Volume 2b

- P-1 Comptroller Exhibit
- MDA Operation and Maintenance Exhibit
- MDA MILCON Exhibits
- MDA Procurement Exhibits

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Defense-Wide  
 FY 2014 President's Budget  
 Exhibit P-1 FY 2014 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

22 Mar 2013

Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2012 (Base & OCO)		FY 2013 Base Request with CR Adj*		FY 2013 OCO Request with CR Adj*		Emergency Disaster Relief Act of 2013		FY 2013 Total Request with CR Adj*		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 01: Major Equipment													
Major Equipment, Missile Defense Agency													
25	THAAD	B	44	604,650	36	460,728					36	460,728	U
26	Aegis BMD	B	28	378,393	29	389,626					29	389,626	U
27	BMDS AN/TPY-2 Radars	B	2	380,195	1	217,244					1	217,244	U
28	Aegis Ashore Phase III	A											U
29	Radar Spares	B				10,177						10,177	U
30	Iron Dome	A											U
Total Major Equipment				1,363,238		1,077,775						1,077,775	
Total Procurement, Defense-Wide				1,363,238		1,077,775						1,077,775	

P-1C: FY 2014 President's Budget (Published Version), as of March 22, 2013 at 08:43:44

\* Reflects the FY 2013 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

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Defense-Wide  
 FY 2014 President's Budget  
 Exhibit P-1 FY 2014 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

22 Mar 2013

Appropriation: 0300D Procurement, Defense-Wide

Line No	Item Nomenclature	Ident Code	FY 2014 Base Quantity	S e c
Budget Activity 01: Major Equipment				
Major Equipment, Missile Defense Agency				
25	THAAD	B	36	581,005 U
26	Aegis BMD	B	52	580,814 U
27	BMDS AN/TPY-2 Radars	B		62,000 U
28	Aegis Ashore Phase III	A	1	131,400 U
29	Radar Spares	B		U
30	Iron Dome	A	1	220,309 U
Total Major Equipment			1,575,528	
Total Procurement, Defense-Wide			1,575,528	

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**Line Item Table of Contents (by Appropriation then Line Number)**

***Appropriation 0300D: Procurement, Defense-Wide***

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<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Line Item Number</b>	<b>Line Item Title</b>	<b>Page</b>
25	01	17	MD07	THAAD.....	Volume 2b - 1
26	01	17	MD09	AEGIS BMD.....	Volume 2b - 11
27	01	17	MD11	BMDS AN/TPY-2 Radars.....	Volume 2b - 21
28	01	17	MD73	Aegis Ashore Phase III.....	Volume 2b - 41
29	01	17	MD77	Radar Spares.....	Volume 2b - 45
30	01	17	MD83	Iron Dome.....	Volume 2b - 49

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**Line Item Table of Contents (Alphabetically by Line Item Title)**

<b>Line Item Title</b>	<b>Line Item Number</b>	<b>Line #</b>	<b>BA</b>	<b>BSA</b>	<b>Page</b>
AEGIS BMD	MD09	26	01	17.....	Volume 2b - 11
Aegis Ashore Phase III	MD73	28	01	17.....	Volume 2b - 41
BMDS AN/TPY-2 Radars	MD11	27	01	17.....	Volume 2b - 21
Iron Dome	MD83	30	01	17.....	Volume 2b - 49
Radar Spares	MD77	29	01	17.....	Volume 2b - 45
THAAD	MD07	25	01	17.....	Volume 2b - 1

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# Fiscal Year 2014 Budget Estimates

## Missile Defense Agency (MDA)



March 2013

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**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

<u>Appropriation Summary</u>	<u>FY 2012 Actual</u>	<u>Price Change</u>	<u>Program Change</u>	<u>FY 2013 Estimate</u>	<u>Price Change</u>	<u>Program Change</u>	<u>FY 2014 Estimate</u>
O&M, Defense-Wide	\$201.7	\$4.2	\$54.1	\$260.0	\$4.9	\$-8.7	\$256.2

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
	<b><u>Actual</u></b>	<b><u>Estimate</u></b>	<b><u>Estimate</u></b>
<b>1. Operational Support</b>	<b>201,733</b>	<b>259,975</b>	<b>256,201</b>
Aegis Ballistic Missile Defense (BMD)	0	12,163	18,444
Ballistic Missile Defense Systems (BMDS) Radar	157,831	192,133	145,798
Terminal High Altitude Area Defense (THAAD)	43,902	55,679	91,959
<b>Total Operation and Maintenance, Defense-Wide</b>	<b>201,733</b>	<b>259,975</b>	<b>256,201</b>

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
	<b><u>Actual</u></b>	<b><u>Estimate</u></b>	<b><u>Estimate</u></b>
<b>1. Operational Support</b>	<b>201,733</b>	<b>259,975</b>	<b>256,201</b>
Aegis Ballistic Missile Defense (BMD)	0	12,163	18,444
Ballistic Missile Defense Systems (BMDS) Radar	157,831	192,133	145,798
Terminal High Altitude Area Defense (THAAD)	43,902	55,679	91,959
<b>Total Operation and Maintenance, Defense-Wide</b>	<b>201,733</b>	<b>259,975</b>	<b>256,201</b>

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

	<u>FY 2012</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2013</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2014</u>	
	<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	
		<u>Percent</u>				<u>Percent</u>				
<b><u>DWCF Purchases</u></b>										
679	Cost Reimbursable Purchase	2,205	2.00%	44	1,997	4,246	1.90%	81	-1,945	2,382
<b>699</b>	<b>Total DWCF Purchases</b>	<b>2,205</b>		<b>44</b>	<b>1,997</b>	<b>4,246</b>		<b>81</b>	<b>-1,945</b>	<b>2,382</b>
<b><u>Other Purchases</u></b>										
920	Supplies & Materials (Non-Fund)	6,483	2.00%	130	-6,613	0	1.90%	0	24,537	24,537
922	Equipment Maintenance By Contract	188,365	2.00%	3,767	39,316	231,448	1.90%	4,398	-20,321	215,525
930	Other Depot Maintenance (Non-Fund)	0	2.00%	0	7,917	7,917	1.90%	150	-8,067	0
937	Locally Purchased Fuel (Non-Fund)	2,996	8.37%	251	-3,247	0	-2.95%	0	52	52
987	Other Intra-Govt Purch	0	2.00%	0	0	0	1.90%	0	3,439	3,439
989	Other Services	1,684	2.00%	34	14,646	16,364	1.90%	311	-6,409	10,266
<b>999</b>	<b>Total Other Purchases</b>	<b>199,528</b>		<b>4,182</b>	<b>52,019</b>	<b>255,729</b>		<b>4,859</b>	<b>-6,769</b>	<b>253,819</b>
	<b>Total</b>	<b>201,733</b>		<b>4,226</b>	<b>54,016</b>	<b>259,975</b>		<b>4,940</b>	<b>-8,714</b>	<b>256,201</b>

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

	<u>FY 2012</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2013</u>	<u>Price</u>	<u>Price</u>	<u>Program</u>	<u>FY 2014</u>	
	<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	
		<u>Percent</u>				<u>Percent</u>				
<b><u>DWCF Purchases</u></b>										
679	Cost Reimbursable Purchase	2,205	2.00%	44	1,997	4,246	1.90%	81	-1,945	2,382
<b>699</b>	<b>Total DWCF Purchases</b>	<b>2,205</b>		<b>44</b>	<b>1,997</b>	<b>4,246</b>		<b>81</b>	<b>-1,945</b>	<b>2,382</b>
<b><u>Other Purchases</u></b>										
920	Supplies & Materials (Non-Fund)	6,483	2.00%	130	-6,613	0	1.90%	0	24,537	24,537
922	Equipment Maintenance By Contract	188,365	2.00%	3,767	39,316	231,448	1.90%	4,398	-20,321	215,525
930	Other Depot Maintenance (Non-Fund)	0	2.00%	0	7,917	7,917	1.90%	150	-8,067	0
937	Locally Purchased Fuel (Non-Fund)	2,996	8.37%	251	-3,247	0	-2.95%	0	52	52
987	Other Intra-Govt Purch	0	2.00%	0	0	0	1.90%	0	3,439	3,439
989	Other Services	1,684	2.00%	34	14,646	16,364	1.90%	311	-6,409	10,266
<b>999</b>	<b>Total Other Purchases</b>	<b>199,528</b>		<b>4,182</b>	<b>52,019</b>	<b>255,729</b>		<b>4,859</b>	<b>-6,769</b>	<b>253,819</b>
	<b>Total</b>	<b>201,733</b>		<b>4,226</b>	<b>54,016</b>	<b>259,975</b>		<b>4,940</b>	<b>-8,714</b>	<b>256,201</b>

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

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

**Personnel Summary Explanations:**

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.



**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

	<u>TOTAL</u>
<b>FY 2013 President's Budget Request (Amended, if applicable)</b>	<b>259,975</b>
1. Congressional Adjustments	
a. Distributed Adjustments	
b. Undistributed Adjustments	
c. Adjustments to Meet Congressional Intent	
d. General Provisions	
<b>FY 2013 Appropriated Amount</b>	<b>259,975</b>
2. War-Related and Disaster Supplemental Appropriations	
3. Fact-of-Life Changes	
<b>FY 2013 Baseline Funding</b>	<b>259,975</b>
4. Reprogrammings (Requiring 1415 Actions)	
<b>Revised FY 2013 Estimate</b>	<b>259,975</b>
5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings	
<b>FY 2013 Normalized Current Estimate</b>	<b>259,975</b>
6. Price Change	4,940
7. Functional Transfers	
8. Program Increases	
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

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

	<u><b>TOTAL</b></u>
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	
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
<b>FY 2014 Budget Request</b>	<b>256,201</b>

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

	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.

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

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

**I. Description of Operations Financed (cont.)**

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 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.

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

**II. Force Structure Summary (cont.)**

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-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

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

**II. Force Structure Summary (cont.)**

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.

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

III. Financial Summary (\$ in thousands)

	FY 2013						FY 2014 <u>Estimate</u>
	FY 2012 <u>Actual</u>	Budget <u>Request</u>	<u>Congressional Action</u>			Current <u>Estimate</u>	
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
<b>A. BA Subactivities</b>							
<b>1. Operational Support</b>	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
<b>Total</b>	<b>201,733</b>	<b>259,975</b>				<b>259,975</b>	<b>256,201</b>

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

III. Financial Summary (\$ in thousands)

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



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

**III. Financial Summary (\$ in thousands)**

	<b>Amount</b>	<b>Totals</b>
<b>C. Reconciliation of Increases and Decreases</b>		
<b>FY 2013 President's Budget Request (Amended, if applicable)</b>		<b>259,975</b>
1. Congressional Adjustments		
a. Distributed Adjustments		
b. Undistributed Adjustments		
c. Adjustments to Meet Congressional Intent		
d. General Provisions		
<b>FY 2013 Appropriated Amount</b>		<b>259,975</b>
2. War-Related and Disaster Supplemental Appropriations		
3. Fact-of-Life Changes		
<b>FY 2013 Baseline Funding</b>		<b>259,975</b>
4. Reprogrammings (Requiring 1415 Actions)		
<b>Revised FY 2013 Estimate</b>		<b>259,975</b>
5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings		
<b>FY 2013 Normalized Current Estimate</b>		<b>259,975</b>
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

Missile Defense Agency  
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**III. Financial Summary (\$ in thousands)**

<b>C. Reconciliation of Increases and Decreases</b>	<b>Amount</b>	<b>Totals</b>
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	
<b>FY 2014 Budget Request</b>		<b>256,201</b>

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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:

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

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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<sub>o</sub> downtime. For AN/TPY-2 radars, performance incentives are calculated as follows:

Target A <sub>o</sub> = 90%	
A <sub>o</sub> > 90%	100% of Performance Incentive Pool
A <sub>o</sub> ≥ 70%, <90%	Actual A <sub>o</sub> % achieved times pool amount
A <sub>o</sub> < 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>	<u>FY 2012</u> <u>Actual</u>	<u>Change</u> <u>FY 2012/FY 2013</u>		<u>FY 2013</u> <u>Estimate</u>	<u>Change</u> <u>FY 2013/FY 2014</u>		<u>FY 2014</u> <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
<b>699 Total DWCF Purchases</b>	<b>2,205</b>	<b>44</b>	<b>1,997</b>	<b>4,246</b>	<b>81</b>	<b>-1,945</b>	<b>2,382</b>
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
<b>999 Total Other Purchases</b>	<b>199,528</b>	<b>4,182</b>	<b>52,019</b>	<b>255,729</b>	<b>4,859</b>	<b>-6,769</b>	<b>253,819</b>
<b>Total</b>	<b>201,733</b>	<b>4,226</b>	<b>54,016</b>	<b>259,975</b>	<b>4,940</b>	<b>-8,714</b>	<b>256,201</b>

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
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**CONTRACT SERVICES FUNDING**  
**Defense-Wide Missile Defense Agency**  
**Operation and Maintenance**  
**(\$ in Millions)**

Line	By PB/OP-32 Inflation Category Code	FY 2012	FY 2013	FY 2013	FY 2014	FY 2014
		Base & OCO <u>Actual</u> <sup>/1</sup>	Base <u>Request</u> <sup>/2</sup>	OCO <u>Request</u> <sup>/2</sup>	Base <u>Request</u>	OCO <u>Request</u>
931	Contract Consultants					
932	Mgmt and Professional Support Services					
933	Studies, Analysis and Evaluations					
934	Engineering and Technical Services					
	<b>Total 25.1 - Advisory and Assistance Services</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
989	Other Contracts					
926	Other Overseas Purchases					
	<b>Total 25.2 - Other Services</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
923	Facility Maintenance					
	<b>Total 25.4 - Operation and Maintenance of Facilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
985	Research and Development Contracts					
	<b>Total 25.5 - Research and Development Contracts</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
986	Medical Care					
	<b>Total 25.6 - Medical Care</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
922	Equipment Maintenance - Contract					
927	Air Defense Contracts					
928	Ship Maintenance by Contract					
929	Aircraft Rework by Contract					
930	Other Depot Maintenance (Non-Fund)					
990	IT Contract Support Services					
	<b>Total 25.7 - Operation and Maintenance of Equipment</b>	<b>188</b>	<b>231</b>	<b>0</b>	<b>216</b>	<b>0</b>
964	Subsistence Contracts					
	<b>Total 25.8- Subsistence and Support of Persons</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total</b>	<b>188</b>	<b>231</b>	<b>0</b>	<b>216</b>	<b>0</b>

Source: Program Resources Collection Process as of XX XXXXX, 2011

Numbers may not add due to rounding

<sup>1</sup> FY 2012 includes Overseas Contingency Operations (OCO) funding.

<sup>2</sup> Reflects the FY 2014 President's Budget request.

**MISSILE DEFENSE AGENCY**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2014 Budget Estimates**

**CONTRACT SERVICES - MANPOWER**  
**Defense-Wide Missile Defense Agency**  
**Operation and Maintenance**  
**Contractor Full-Time Equivalents**

Line	By PB/OP-32 Inflation Category Code	FY 2012	FY 2013	FY 2013	FY 2014	FY 2014
		Base & OCO <u>Actual</u> <sup>1</sup>	Base <u>Request</u>	OCO <u>Request</u>	Base <u>Request</u>	OCO <u>Request</u>
931	Contract Consultants					
932	Mgmt and Professional Support Services					
933	Studies, Analysis and Evaluations					
934	Engineering and Technical Services					
	<b>Total 25.1 - Advisory and Assistance Services</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
989	Other Contracts					
926	Other Overseas Purchases					
	<b>Total 25.2 - Other Services</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
923	Facility Maintenance					
	<b>Total 25.4 - Operation and Maintenance of Facilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
985	Research and Development Contracts					
	<b>Total 25.5 - Research and Development Contracts</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
986	Medical Care					
	<b>Total 25.6 - Medical Care</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
922	Equipment Maintenance - Contract					
927	Air Defense Contracts					
928	Ship Maintenance by Contract					
929	Aircraft Rework by Contract					
930	Other Depot Maintenance (Non-Fund)					
990	IT Contract Support Services					
	<b>Total 25.7 - Operation and Maintenance of Equipment</b>	<b>110</b>	<b>605</b>	<b>0</b>	<b>110</b>	<b>0</b>
964	Subsistence Contracts					
	<b>Total 25.8- Subsistence and Support of Persons</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total</b>	<b>110</b>	<b>605</b>	<b>0</b>	<b>110</b>	<b>0</b>

Source: Program Resources Collection Process as of XX XXXXX, 2011

Numbers may not add due to rounding

<sup>1</sup> FY 2011 includes Overseas Contingency Operations (OCO) funding.



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**FY 2014 - FY 2018 Integrated Program/Budget Submission Guidance**

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**CONTRACT SERVICES**

**Defense-Wide Missile Defense Agency**  
**Operation and Maintenance**  
**Justification Narrative**

**Description of Services Financed:**

Army force structure for THAAD is currently set at eight 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). The FY 2014 funding also provides for the daily operation and sustainment of nine Army Navy/Transportable Radar Surveillance and Control-2 (AN/TPY-2) radars: five forward-based radars (1 U.S. , 4 OCONUS) , and four Terminal High Altitude Area Defense (THAAD) battery radars (3 U.S., 1 OCONUS). These services are furnished through Centralized Contractor Logistics Support (CCLS) contracts. 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.

**Reporting Limitations:**

We are complying with section 803 of the National Defense Authorization Act for FY 2010 (Public Law 111-84), to provide an inventory of contract services by FY 2014 that detail expenditures and FTEs by contract vehicle. Majority of MDA's contracts are performance based and not FTE driven. At this point, MDA Contracts do require the contractors to report FTEs.

**Summary of Increases/Decreases:**

The increase in FY 2014 is due to maintaining two additional batteries and the provisioning of the Army Hybrid Cell. The THAAD embedded Army Hybrid Cell is composed of combined MDA and Army personnel providing Doctrine, Training, Leadership, Organization, Materiel, Soldier (DTLOMS) support for the THAAD system. The Hybrid Cell provides technical guidance, financial management, cost and schedule performance analysis, cost estimation and analysis, integration activities, and sub-contract management to ensure effective use of

**Attachment 4.7-2**

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

# Missile Defense Agency

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**Fiscal Year 2014**

**President's Budget Submittal**

**Military Construction Exhibit**



**April 2013**

**MISSILE DEFENSE AGENCY  
FY 2014 MILITARY CONSTRUCTION, DEFENSE-WIDE  
PRESIDENT'S BUDGET SUBMITTAL  
DESCRIPTIVE SUMMARIES**

(\$ in Thousands)

<b><u>Program</u></b>	<b><u>Authorization</u></b>	<b><u>Appropriation</u></b>
Major Construction	114,204	199,204
Unspecified Minor Construction	2,000	2,000
MILCON Planning & Design	<u>10,891</u>	<u>10,891</u>
TOTAL MILITARY CONSTRUCTION	127,095	212,095

**MISSILE DEFENSE AGENCY  
FY 2014 MILITARY CONSTRUCTION, DEFENSE-WIDE  
PROJECT SUMMARY  
BY LOCATION**

(\$ in Thousands)

<u>State/Country/Installation/Project</u>	<u>Auth Request</u>	<u>Approp Request</u>	<u>New/Current Mission</u>
<b>Major Construction</b>			
<b>Alaska</b>			
Clear Air Force Station BMDS Upgrade Early Warning Radar	17,204	17,204	New
Ft. Greely Mechanical-Electrical Building, Missile Field #1	82,000	82,000	New
<b>Worldwide Classified</b>			
AN/TPY-2 Radar Site	15,000	15,000	New
<b>Romania</b>			
Deveselu Base Aegis Ashore Missile Defense System Complex, Increment 2	-	85,000	New
<b>Unspecified Minor Construction</b>	2,000	2,000	
<b>MILCON Planning and Design</b>	10,891	10,891	
<b>TOTAL MILITARY CONSTRUCTION</b>	127,095	212,095	

<b>1. COMPONENT</b> MDA		<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>						<b>2. DATE</b> Mar 2013			
<b>3. INSTALLATION AND LOCATION</b> Clear Air Force Station, Alaska					<b>4. COMMAND</b> Missile Defense Agency			<b>5. AREA CONSTR. COST INDEX</b> 2.01			
<b>6. PERSONNEL</b> STRENGTH: N/A: Tenant of U.S. Air Force		PERMANENT			STUDENTS			SUPPORTED			
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
<b>7. INVENTORY DATA (\$000)</b>											
A. TOTAL ACERAGE								N/A			
B. INVENTORY TOTAL AS OF								N/A			
C. AUTHORIZATION NOT YET IN INVENTORY								0			
D. AUTHORIZATION REQUESTED IN THE FY2014								17,204			
E. AUTHORIZATION REQUESTED IN THE FY2015								0			
F. PLANNED IN NEXT THREE PROGRAM YEARS								0			
G. REMAINING DEFICIENCY								0			
H. GRAND TOTAL.								17,204			
<b>8. PROJECTS REQUESTED IN THE FY2014 PROGRAM:</b>											
CATEGORY CODE		PROJECT TITLE			SCOPE		COST (\$000)		DESIGN STATUS		
1311		BMDS Upgrade Early Warning Radar			7,400 SF		17,204		Mar 12 Dec 13		
<b>9. FUTURE PROJECTS:</b>											
CATEGORY CODE		PROJECT TITLE			SCOPE		COST (\$000)				
<b>10. MISSION OR MAJOR FUNCTIONS:</b> The mission of the Missile Defense Agency is to develop and field an integrated, layered Ballistic Missile Defense System (BMDS) to defend the United States, our deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight.											
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>											
A. Air Pollution:								N/A			
B. Water pollution:								N/A			
C. Occupational safety and health (OSH):								N/A			

1. COMPONENT MDA	<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>			2. DATE Mar 2013
3. INSTALLATION AND LOCATION Clear Air Force Station, Alaska		4. PROJECT TITLE BMDS Upgrade Early Warning Radar		
5. PROGRAM ELEMENT 0603884C	6. CATEGORY CODE 1311	7. PROJECT NUMBER MDA 634	8. PROJECT COST (\$000) 17,204	
<b>9. COST ESTIMATES</b>				
<b>ITEM</b>	<b>U/M (M/E)</b>	<b>QUANTITY</b>	<b>UNIT COST</b>	<b>COST (\$000)</b>
<u>PRIMARY FACILITIES</u>				12,688
Add/Alter Radar Building	m2 (SF)	474 (5,100)	11,556 (1,074)	(5,476)
SATCOM Earth Terminal Fac (HEMP)	m2 (SF)	214 (2,300)	9,813 (913)	(2,100)
SATCOM Integrated Walkway/Utilidor	m2 (SF)	74 (799)	15,138 (1,402)	(1,120)
3MW Power Generator	KW	3000	1,330	(3,992)
<u>SUPPORTING FACILITIES</u>				2,697
HVAC/Electrical/Telecom Services	LS			(933)
Water, Sewer, Gas	LS			(185)
Paving, Walks, Curbs and Gutters	LS			(121)
Anti-Terrorism/Force Protection	LS			(106)
Site Imp (429)/Demo (100)	LS			(529)
Other (Mob/Demob)	LS			(823)
SUBTOTAL				15,385
CONTINGENCY (5%)				769
TOTAL CONTRACT COST				16,154
SIOH (6.5%)				1,050
TOTAL REQUEST				17,204
TOTAL REQUEST ROUNDED				17,204
INSTALLED EQUIPMENT-OTHER APPROP				(150,700)
<b>10. DESCRIPTION OF PROPOSED CONSTRUCTION:</b> Modify existing Phased Array Radar Facility to enable installation of the Upgrade Early Warning Radar (UEWR) equipment, Missile Defense Communication Network equipment, Single Stimulation Framework equipment, and the Satellite Communication Earth Terminal equipment. Provide modifications on various floors of the radar building including the existing communication room, computer room, radar room, Missile Warning Operation Center and related support spaces as necessary. Modify power and HVAC systems to allow simultaneous operation of both new and legacy UEWR equipment. Demolish existing fuel tank foundation and piping to construct a new concrete foundation and pad for the Earth Terminal antenna radome. Construct an integrated walkway/utilidor to provide High Altitude Electromagnetic Pulse (HEMP) and weather protected connections between the UEWR facility and the new antenna. Install one additional 3MW generator in the existing power plant. Supporting facilities include: electrical services, water, sewer, storm drainage, fire protection and alarm systems, telecommunications systems, and anti-terrorism/force protection security measures to include vehicle denial capability. Access for the physically disabled will be maintained.				
<b>11. REQUIREMENT:</b> 7,400 SF                      ADEQUATE: -                      SUBSTANDARD: -7,400 SF <u>PROJECT:</u> Construct facility modifications to upgrade the existing Early Warning Radar at Clear Air Force Station (AFS) in support of the Missile Defense Agency's (MDA) Ballistic Missile Defense System. (New Mission)  <u>REQUIREMENT:</u> This project is required to enhance existing Early Warning Radars and satellite communications capability designed to support the Missile Defense Agency's enhanced homeland defense capability.  <u>CURRENT SITUATION:</u> Current Early Warning Radar at Clear Air Force Station does not have enhanced sensor capabilities to adequately meet technological and threat assessments to support the Ballistic Missile Defense System (BMDS). This project supports the BMDS and enables the Early Warning Radar at Clear AFS to support planned enhanced homeland defense.				

1. COMPONENT MDA	<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>	2. DATE Mar 2013																																						
3. INSTALLATION AND LOCATION Clear Air Force Station, Alaska																																								
4. PROJECT TITLE : BMDS Upgrade Early Warning Radar		5. PROJECT NUMBER MDA 634																																						
<p>11. REQUIRED (cont) :</p> <p><u>IMPACT IF NOT PROVIDED:</u> If this project is not funded, planned enhancement of the sensors and communications systems elements will not be available to support enhanced homeland defensive operations in 2018. Ultimately, the full potential to defend the United States against limited ballistic missile attack will not be achieved.</p> <p><u>ADDITIONAL INFORMATION:</u> Cost estimates were derived from RS Means Construction Cost data, DoD Facilities Pricing Guide, UFC 3-701-09, analyzing costs for similar existing facilities at Thule, Greenland and then updated based on 35% design. This project has been coordinated with the installation's physical security plans and required physical security and/or combating terrorism measures are included. Environmental analysis and documentation has been coordinated with US Air Force Space Command. Recent Air Force Space Command modifications to the power plant have allowed room for the MDA generator. The Air Force also intends to upgrade the sensed perimeter fence and construct two fuel tanks to support the power plant.</p> <p>12. SUPPLEMENTAL DATA:</p> <p>A. Estimated Design Data</p> <table border="0" style="width: 100%;"> <tr> <td colspan="2">(1) Status</td> </tr> <tr> <td style="padding-left: 20px;">(a) Date Design Started:</td> <td style="text-align: right;">Mar 2012</td> </tr> <tr> <td style="padding-left: 20px;">(b) Percent complete as of January 2013:</td> <td style="text-align: right;">35%</td> </tr> <tr> <td style="padding-left: 20px;">(c) Date 35% Design Complete:</td> <td style="text-align: right;">Sep 2012</td> </tr> <tr> <td style="padding-left: 20px;">(d) Date Design Complete:</td> <td style="text-align: right;">Dec 2013</td> </tr> <tr> <td style="padding-left: 20px;">(e) Parametric Cost Estimating Used to Develop Costs:</td> <td style="text-align: right;">No</td> </tr> <tr> <td style="padding-left: 20px;">(f) Type of Design Contract:</td> <td style="text-align: right;">Design-Bid-Build</td> </tr> <tr> <td colspan="2">(2) Basis</td> </tr> <tr> <td style="padding-left: 20px;">(a) Standard or Repetitive Design</td> <td style="text-align: right;">No</td> </tr> <tr> <td style="padding-left: 20px;">(b) Where Design Was Most Recently Used</td> <td style="text-align: right;">N/A</td> </tr> <tr> <td colspan="2">(3) Total Design Cost (c) = (a)+(b) or (d)+(e) (\$000)</td> </tr> <tr> <td style="padding-left: 20px;">(a) Production of Plans and Specifications:</td> <td style="text-align: right;">444</td> </tr> <tr> <td style="padding-left: 20px;">(b) All Other Design Costs:</td> <td style="text-align: right;">656</td> </tr> <tr> <td style="padding-left: 20px;">(c) Total Design Costs</td> <td style="text-align: right;">1,100</td> </tr> <tr> <td style="padding-left: 20px;">(d) Contract</td> <td style="text-align: right;">766</td> </tr> <tr> <td style="padding-left: 20px;">(e) In-house</td> <td style="text-align: right;">334</td> </tr> <tr> <td style="padding-left: 20px;">(4) Construction Contract Award</td> <td style="text-align: right;">Jan 2014</td> </tr> <tr> <td style="padding-left: 20px;">(5) Construction Start</td> <td style="text-align: right;">Feb 2014</td> </tr> <tr> <td style="padding-left: 20px;">(6) Construction Complete</td> <td style="text-align: right;">Mar 2016</td> </tr> </table>			(1) Status		(a) Date Design Started:	Mar 2012	(b) Percent complete as of January 2013:	35%	(c) Date 35% Design Complete:	Sep 2012	(d) Date Design Complete:	Dec 2013	(e) Parametric Cost Estimating Used to Develop Costs:	No	(f) Type of Design Contract:	Design-Bid-Build	(2) Basis		(a) Standard or Repetitive Design	No	(b) Where Design Was Most Recently Used	N/A	(3) Total Design Cost (c) = (a)+(b) or (d)+(e) (\$000)		(a) Production of Plans and Specifications:	444	(b) All Other Design Costs:	656	(c) Total Design Costs	1,100	(d) Contract	766	(e) In-house	334	(4) Construction Contract Award	Jan 2014	(5) Construction Start	Feb 2014	(6) Construction Complete	Mar 2016
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<b>1. COMPONENT</b> MDA	<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>	<b>2. DATE</b> Mar 2013
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**3. INSTALLATION AND LOCATION**  
Clear Air Force Station, Alaska

<b>4. PROJECT TITLE :</b> BMDS Upgrade Early Warning Radar	<b>5. PROJECT NUMBER</b> MDA 634
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**12. SUPPLEMENTAL DATA: (cont)**

B. Equipment associated with this project which will be provided from other appropriations:

<u>Equipment</u>	<u>Procuring</u>	<u>Fiscal Year</u>	<u>Cost</u>
<u>Nomenclature</u>	<u>Appropriation</u>	<u>Appropriated</u>	<u>(\$000)</u>
<u>Or Requested</u>			
Long Lead Radar Equipment	RDT&E	FY13	\$ 127,000
Network Equipment	RDT&E	FY13	\$ 4,700
AN/GSC-52B(V) 6 Earth Terminal	RDT&E	FY13	\$ 11,000
Miscellaneous Equip Costs	RDT&E	FY13	\$ 8,000
		TOTAL	\$ 150,700

<b>1. COMPONENT</b> MDA		<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>						<b>2. DATE</b> Mar 2013			
<b>3. INSTALLATION AND LOCATION</b> Ft. Greely, Alaska					<b>4. COMMAND</b> Missile Defense Agency			<b>5. AREA CONSTR. COST INDEX</b> 2.02			
<b>6. PERSONNEL</b>  STRENGTH: N/A: Tenant of U.S. Army		PERMANENT			STUDENTS			SUPPORTED			
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
<b>7. INVENTORY DATA (\$000)</b>											
A. TOTAL ACERAGE						..... N/A					
B. INVENTORY TOTAL AS OF						..... N/A					
C. AUTHORIZATION NOT YET IN INVENTORY						..... 0					
D. AUTHORIZATION REQUESTED IN THE FY2014						..... 82,000					
E. AUTHORIZATION REQUESTED IN THE FY2015						..... 0					
F. PLANNED IN NEXT THREE PROGRAM YEARS						..... 0					
G. REMAINING DEFICIENCY						..... 0					
H. GRAND TOTAL.						..... 82,000					
<b>8. PROJECTS REQUESTED IN THE FY2014 PROGRAM:</b>											
CATEGORY CODE		PROJECT TITLE			SCOPE		COST (\$000)		DESIGN STATUS		
8910		Mechanical-Electric Building Missile Field 1			10,400 SF		82,000		START		COMPLETE
									Apr 13		Jul 14
<b>9. FUTURE PROJECTS:</b>											
CATEGORY CODE		PROJECT TITLE			SCOPE		COST (\$000)				
<b>10. MISSION OR MAJOR FUNCTIONS:</b> The mission of the Missile Defense Agency is to develop and field an integrated, layered Ballistic Missile Defense System (BMDS) to defend the United States, our deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight.											
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>											
A. Air Pollution:						N/A					
B. Water pollution:						N/A					
C. Occupational safety and health (OSH):						N/A					

1. COMPONENT MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA			2. DATE Mar 2013	
3. INSTALLATION AND LOCATION Fort Greely, Alaska		4. PROJECT TITLE Mechanical-Electrical Building, Missile Field #1			
8. PROGRAM ELEMENT 0603882C	6. CATEGORY CODE 8910	7. PROJECT NUMBER MDA 649		8. PROJECT COST (\$000) 82,000	
<b>9. COST ESTIMATES</b>					
ITEM		U/M	QUANTITY		UNIT COST
<u>PRIMARY FACILITIES</u>					
Mechanical-Electrical Building (MEB)		m2 (SF)	966 (10,400)		10,178 (945)
MEB Blast Protection		LS			(10,605)
MEB HEMP & EMI Protection		LS			(7,858)
Special Foundations		LS			(6,908)
Installed Equipment		LS			(6,565)
Extend Utilidor & Interface		LS			(12,261)
Security Infrastructure		LS			(2,000)
<u>SUPPORTING FACILITIES</u>					
Site HEMP Electrical		LS			14,312
Water, Sewer, Gas		LS			(3,523)
Paving, Walks		LS			(1,000)
Site Imp / Demo		LS			(1,501)
Information/Communication Systems		LS			(7,038)
SUBTOTAL					(1,250)
CONTINGENCY (5.00%)					70,341
TOTAL CONTRACT COST					3,517
DESIGN/BUILD DESIGN COST (4.00%)					73,858
SIOH (6.50%)					2,954
TOTAL REQUEST					4,801
TOTAL ROUNDED REQUEST					81,613
INSTALLED EQUIPMENT-OTHER APPROP					82,000
					2,500
<p><b>10. DESCRIPTION OF PROPOSED CONSTRUCTION:</b> Construct a High Altitude Electromagnetic Pulse (HEMP) and blast protected Mechanical-Electrical Building (MEB) and associated utility and security infrastructure. The MEB construction utilizes reinforced concrete walls and ceiling for blast protection covered with metal panels, and a standing seam metal roof. Special foundations will be required for the MEB. The MEB will house redundant HEMP protected mechanical and electrical equipment supporting the launch control components. Other MEB construction includes lightning protection and equipment grounding systems.</p> <p>MEB Blast Protection consists of 20-inch thick reinforced concrete walls and ceiling, blast rated doors and valves, and foundation substructure anchoring.</p> <p>MEB HEMP and Electromagnetic Interference (EMI) Protection include 1/4-inch thick steel plates and custom built specialty power filters that provide HEMP and EMI protection. The HEMP and EMI protection is required to be tested and certified.</p> <p>The MEB foundations include special features to meet site specific ground motion requirements, seismic requirements, and blast protection requirements.</p> <p>Installed Equipment within the MEB supports the launch control components within the silos interface vaults and includes: dual chillers, heat exchanger, water pumps, demineralizing system for humidity control, transformers, uninterruptable</p>					



1. COMPONENT MDA	<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>	2. DATE Mar 2013
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3. INSTALLATION AND LOCATION  
Fort Greely, Alaska

4. PROJECT TITLE Mechanical-Electrical Building, Missile Field #1	5. PROJECT NUMBER MDA 649
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**12. SUPPLEMENTAL DATA:**

A. Estimated Design Data

- (1) Status:
  - (a) Date Design Started Apr 2013
  - (b) Percent Complete As Of January 2013 0%
  - (c) Date 35% Design Complete Mar 2014
  - (d) Date Design Complete Jul 2014
  - (e) Analogous Cost Estimating Used To Develop Cost Yes
  - (f) Type of Design Contract Design-Build
- (2) Basis:
  - (a) Standard or Repetitive Design Yes\*
  - (b) Where Design Was Most Recently Used Alaska
- (3) Total Design Cost (c) = (a)+(b) or (d)+(e) (\$000)
  - (a) Production of Plans and Specifications 4,200
  - (b) All Other Design Costs 2,800
  - (c) Total Design Costs 7,000
  - (d) Contract 5,000
  - (e) In-House 2,000
- (4) Contract Award Feb 2014
- (5) Construction Start Apr 2014
- (6) Construction Completion May 2016

\* The MEB design-build will be based upon the existing MEB-2 at Missile Field 2 Fort Greely, AK, to included enhanced design for supporting HEMP infrastructure.

B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Procuring Appropriation	FY Appropriated or Requested	Cost \$(000)
Security Equipment	RDT&E	FY14	2,500

<b>1. COMPONENT</b> MDA	<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>						<b>2. DATE</b> Mar 2013				
<b>3. INSTALLATION AND LOCATION</b> Worldwide Classified						<b>4. COMMAND</b> Missile Defense Agency				<b>5. AREA CONSTR. COST INDEX</b> 1.40	
<b>6. PERSONNEL</b>  STRENGTH: N/A: Tenant of U.S. Army	PERMANENT			STUDENTS			SUPPORTED				
	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL	
<b>7. INVENTORY DATA (\$000)</b>											
A. TOTAL ACERAGE ..... N/A											
B. INVENTORY TOTAL AS OF ..... N/A											
C. AUTHORIZATION NOT YET IN INVENTORY ..... 0											
D. AUTHORIZATION REQUESTED IN THE FY2014 ..... 15,000											
E. AUTHORIZATION REQUESTED IN THE FY2015 ..... 0											
F. PLANNED IN NEXT THREE PROGRAM YEARS ..... 0											
G. REMAINING DEFICIENCY ..... 0											
H. GRAND TOTAL ..... 15,000											
<b>8. PROJECTS REQUESTED IN THE FY2014 PROGRAM:</b>											
CATEGORY CODE		PROJECT TITLE			SCOPE		COST (\$000)	DESIGN STATUS			
3121		AN/TPY-2 Radar Site			1 EA		15,000	Mar 13	Jan 14		
<b>9. FUTURE PROJECTS:</b>											
CATEGORY CODE		PROJECT TITLE			SCOPE		COST (\$000)				
<b>10. MISSION OR MAJOR FUNCTIONS:</b> The mission of the Missile Defense Agency is to develop and field an integrated, layered Ballistic Missile Defense System (BMDS) to defend the United States, our deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight.											
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>											
A. Air Pollution:					N/A						
B. Water pollution:					N/A						
C. Occupational safety and health (OSH):					N/A						



1. COMPONENT MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA	2. DATE Mar 2013																																						
3. INSTALLATION AND LOCATION Worldwide Classified																																								
4. PROJECT TITLE : AN/TPY-2 Radar Site		5. PROJECT NUMBER MDA 648																																						
<p><b>11. REQUIRED (cont) :</b></p> <p><u>IMPACT IF NOT PROVIDED:</u> If this project is not provided, the radar cannot be deployed, limiting the capability of the BMDS to defend against regional threats. Deployment &amp; operation of the radar is not possible without preparing this site.</p> <p><u>ADDITIONAL INFORMATION:</u> Analogous cost estimates were derived by analyzing costs for similar designed facilities that have been constructed at other locations.</p> <p>This project is being coordinated with the appropriate physical security plans. Required physical security and/or anti-terrorism and force protection measures will be included to meet Security System Level A (SSL-A) requirements. All requirements of Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, will be completed prior to construction start.</p> <p>The Army is programming a companion FY14 Forward Operating Site, OCONUS project that will provide Base Operations Support for this radar site. The Army funded project will include dining and recreation space for site personnel as well as site security, administration, medical treatment, base maintenance and warehouse space.</p> <p>Extension of upgraded commercial power to the site will be acquired with other appropriations, and provided in accordance with applicable Defense Federal Acquisition Regulations (DFARs) for utility service contracts.</p> <p>Temporary site activation facilities will be Research, Development, Test and Evaluation (RDT&amp;E) funded and installed at the site, prior to construction start, to provide for site security, coordination and construction material surveillance. All surveillance equipment will be RDT&amp;E funded.</p> <p><b>12. SUPPLEMENTAL DATA:</b></p> <p>A. Estimated Design Data</p> <table border="0"> <tr> <td>(1) Status</td> <td></td> </tr> <tr> <td>    (a) Date Design Started:</td> <td>Mar 2013</td> </tr> <tr> <td>    (b) Percent complete as of January 2013:</td> <td>0%</td> </tr> <tr> <td>    (c) Date 35% Design Complete:</td> <td>Sep 2013</td> </tr> <tr> <td>    (d) Date Design Complete:</td> <td>Jan 2014</td> </tr> <tr> <td>    (e) Analogous Cost Estimating Used to Develop Costs:</td> <td>Yes</td> </tr> <tr> <td>    (f) Type of Design Contract:</td> <td>Design-Bid-Build</td> </tr> <tr> <td>(2) Basis</td> <td></td> </tr> <tr> <td>    (a) Standard or Repetitive Design</td> <td>Yes</td> </tr> <tr> <td>    (b) Where Design Was Most Recently Used</td> <td>Turkey</td> </tr> <tr> <td>(3) Total Design Cost (c) = (a)+(b) or (d)+(e)</td> <td>(\$000)</td> </tr> <tr> <td>    (a) Production of Plans and Specifications:</td> <td>870</td> </tr> <tr> <td>    (b) All Other Design Costs:</td> <td>580</td> </tr> <tr> <td>    (c) Total Design Costs</td> <td>1,450</td> </tr> <tr> <td>    (d) Contract</td> <td>1,020</td> </tr> <tr> <td>    (e) In-house</td> <td>430</td> </tr> <tr> <td>(4) Construction Contract Award</td> <td>Mar 2014</td> </tr> <tr> <td>(5) Construction Start</td> <td>May 2014</td> </tr> <tr> <td>(6) Construction Complete</td> <td>Dec 2014</td> </tr> </table>			(1) Status		(a) Date Design Started:	Mar 2013	(b) Percent complete as of January 2013:	0%	(c) Date 35% Design Complete:	Sep 2013	(d) Date Design Complete:	Jan 2014	(e) Analogous Cost Estimating Used to Develop Costs:	Yes	(f) Type of Design Contract:	Design-Bid-Build	(2) Basis		(a) Standard or Repetitive Design	Yes	(b) Where Design Was Most Recently Used	Turkey	(3) Total Design Cost (c) = (a)+(b) or (d)+(e)	(\$000)	(a) Production of Plans and Specifications:	870	(b) All Other Design Costs:	580	(c) Total Design Costs	1,450	(d) Contract	1,020	(e) In-house	430	(4) Construction Contract Award	Mar 2014	(5) Construction Start	May 2014	(6) Construction Complete	Dec 2014
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1. COMPONENT MDA	<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>	2. DATE Mar 2013
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3. INSTALLATION AND LOCATION  
Worldwide Classified

4. PROJECT TITLE : AN/TPY-2 Radar Site	5. PROJECT NUMBER MDA 648
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12. SUPPLEMENTAL DATA: (cont)

B. Equipment associated with this project which will be provided from other appropriations:

<u>Equipment Nomenclature</u>	<u>Procuring Appropriation</u>	FY <u>Appropriated or Requested</u>	<u>Cost \$ (000)</u>
Radar Mission Equipment	RDT&E	FY11	175,000
Mission C2BMC Equipment	RDT&E	FY13	6,400
Comms Support Equipment	RDT&E	FY13/14	210
IESS Equipment	RDT&E	FY13/14	2,200
Generators	RDT&E	FY13/14	2,510
RST and Long Lead Material	RDT&E	FY13/14	<u>2,420</u>
		SUB-TOTAL	188,740
 Extension of Commercial Power	 RDT&E	 FY15	 <u>750</u>
		SUB-TOTAL	750
		TOTAL RDT&E	189,490

<b>1. COMPONENT</b> MDA		<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>						<b>2. DATE</b> Mar 2013			
<b>3. INSTALLATION AND LOCATION</b> Deveselu Base, Romania				<b>4. COMMAND</b> Missile Defense Agency			<b>5. AREA CONSTR. COST INDEX</b> 0.99				
<b>6. PERSONNEL</b>		PERMANENT			STUDENTS			SUPPORTED			
STRENGTH:		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
N/A: Tenant of U.S. Navy											
<b>7. INVENTORY DATA (\$000)</b>											
A. TOTAL ACERAGE							N/A				
B. INVENTORY TOTAL AS OF							N/A				
C. AUTHORIZATION NOT YET IN INVENTORY							0				
D. AUTHORIZATION REQUESTED IN THE FY2014							0				
E. AUTHORIZATION REQUESTED IN THE FY2015							0				
F. PLANNED IN NEXT THREE PROGRAM YEARS							0				
G. REMAINING DEFICIENCY							0				
H. GRAND TOTAL.							0				
<b>8. PROJECTS REQUESTED IN THE FY2014 PROGRAM:</b>											
CATEGORY		PROJECT TITLE				SCOPE		COST (\$000)		DESIGN STATUS	
CODE										START COMPLETE	
1456		Aegis Ashore Missile Defense System Complex, Increment 2				1 EA		85,000		Sep 11 Jan 13	
<b>9. FUTURE PROJECTS:</b>											
CATEGORY		PROJECT TITLE				SCOPE		COST (\$000)			
CODE											
<b>10. MISSION OR MAJOR FUNCTIONS:</b> The mission of the Missile Defense Agency is to develop and field an integrated, layered Ballistic Missile Defense System (BMDS) to defend the United States, our deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight.											
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>											
A. Air Pollution:							N/A				
B. Water pollution:							N/A				
C. Occupational safety and health (OSH):							N/A				

1. COMPONENT MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA			2. DATE Mar 2013		
3. INSTALLATION AND LOCATION Deveselu Base, Romania		4. PROJECT TITLE Aegis Ashore Missile Defense System Complex, Increment 2				
8. PROGRAM ELEMENT 0603892C	6. CATEGORY CODE 1456	7. PROJECT NUMBER MDA 646		8. PROJECT COST (\$000) 85,000		
<b>9. COST ESTIMATES</b>						
ITEM	U/M (M/E)	QUANTITY		UNIT COST		COST (\$000)
<u>PRIMARY FACILITIES</u>						150,830
Launch Area Infrastructure	EA	3		179,800		(539)
HEMP Radar Deckhouse Support Bldg	m2 (SF)	2,703	(29,100)	9,903	(920)	(26,772)
Radar Deckhouse Foundation	m3 (CY)	268	(350)	1,569	(1,200)	(420)
Special Construction	LS					(980)
Installed Equipment	LS					(4,050)
HEMP Power Infrastructure	LS					(72,000)
Non-HEMP Backup Power	LS					(5,500)
Missile Storage Facility	m2 (SF)	111	(1,200)	9,903	(920)	(1,104)
Communications Equipment Pad	m2 (SF)	1,282	(13,800)	172	(16)	(221)
Secure Warehouse	m2 (SF)	242	(2,600)	5,382	(500)	(1,300)
Fire Station	m3 (SF)	585	(6,300)	6,189	(575)	(3,623)
Entry Control Facility	m2 (SF)	418	(4,500)	4,575	(425)	(1,913)
Central Security Control Facility	m2 (SF)	734	(7,900)	5,597	(520)	(4,108)
Security Fence/Gates/Lighting/ESS	LS					(5,500)
Fuel System and Storage Facilities	BL (GA)	6,430	(200,000)	1,262	(20)	(4,000)
Temporary Facilities/Mob/Demob	LS					(18,800)
<u>SUPPORTING FACILITIES</u>						44,600
Site Electrical	LS					(800)
Non-HEMP distribution	LS					(5,000)
Power Distribution ductbank	LS					(11,000)
Water, Sewer, Gas	LS					(3,200)
Water Supply Building and Storage	LS					(4,800)
Site Improvement/Demo	LS					(14,000)
Pavements & Walkways	LS					(3,200)
Information/Communication Systems	LS					(1,200)
Antiterrorism/Force Protection	LS					(1,400)
SUBTOTAL						195,430
CONTINGENCY (5.00%)						9,771
TOTAL CONTRACT COST						205,201
SIOH (6.50%)						13,338
DBA Insurance Costs						2,240
TOTAL REQUEST						220,779
TOTAL ROUNDED REQUEST						220,800
INSTALLED EQUIPMENT-OTHER APPROP						(380,035)

**10. DESCRIPTION OF PROPOSED CONSTRUCTION:** This project constructs an Aegis Ashore Missile Defense System site in Romania utilizing the Aegis shipboard weapon system; launcher, radar, and command and control components. Congress authorized the full amount of \$220.8M in the NDAA for FY13 and authorized appropriations of \$120.0M (MDA 630). The FY14 funding represents the second increment of this effort. The site will consist of three Mark-41 launcher foundations, aprons and crane pads; Radar Deckhouse foundation and High-Altitude Electromagnetic Pulse (HEMP) protected Aegis Radar Deckhouse Support Building; 4MW of HEMP protected backup power, with a redundant N+2 capacity using relocatable generators, switchgear and transformer components; HEMP protected power distribution system; communications equipment pad; missile storage facility; secure warehouse; 90,000 gallon diesel fuel storage for backup generators; 10,000 gallon diesel fuel storage tank and fuel truck offload facility; two 100,000 gallon fire water storage tanks and suppression pumps; central security control facility; entry control facility; electronic security



<b>1. COMPONENT</b> MDA	<b>FY 2014 MILITARY CONSTRUCTION PROJECT DATA</b>	<b>2. DATE</b> Mar 2013																										
<b>3. INSTALLATION AND LOCATION</b> Deveselu Base, Romania																												
<b>4. PROJECT TITLE</b> Aegis Ashore Missile Defense System Complex, Increment 2	<b>5. PROJECT NUMBER</b> MDA 646																											
<b>11. REQUIRED (cont) :</b>  Temporary site activation facilities will be Research, Development, Test and Evaluation (RDT&E) funded and installed at the site, prior to construction start, to provide for site security, coordination and construction material surveillance. All surveillance equipment and activities will be RDT&E funded.  The reconstitutable Radar Deckhouse will be fabricated, erected and tested as an RDT&E effort at Moorestown, NJ as part of MDA project 627. Once testing is complete, the radar deckhouse will be disassembled and shipped to Romania, where it will be installed on the deckhouse foundation and integrated into the deckhouse support infrastructure on site (see Block 12 paragraph B for cost details).*  Cost estimates were derived from the DoD MILCON Pricing Guide (UFC 3-701-01, June 2010), US Army Corps of Engineers Programming Administration and Execution System (PAX), GSA Pricing Guides, RS Means and by analyzing costs for similar designed facilities that are being constructed at the Pacific Missile Range Facility, HI and updated based on 65% design quantity takeoffs. This project is being coordinated with the appropriate physical security plans. Required physical security and/or anti-terrorism and force protection measures will be included. All requirements of Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, will be completed prior to construction start.  *-The RDT&E narrative shown above and costs (Block 12, paragraph B) were updated from the DD 1391 included in the FY 2013 MILCON Defense Wide Justification Book in order to clarify the relocation of the Moorestown Deckhouse to Romania.																												
<b>12. SUPPLEMENTAL DATA:</b> A. Estimated Design Data (1) Status: <table data-bbox="289 1297 1409 1514"> <tr><td>(a) Date Design Started</td><td>Sep 2011</td></tr> <tr><td>(b) Percent Complete as of January 2013</td><td>100%</td></tr> <tr><td>(c) Date 35% Design Complete</td><td>Apr 2012</td></tr> <tr><td>(d) Date Design Complete</td><td>Jan 2013</td></tr> <tr><td>(e) Parametric Cost Estimating Used To Develop Cost</td><td>No</td></tr> <tr><td>(f) Type of Design Contract</td><td>Design-Bid-Build</td></tr> </table> (2) Basis: <table data-bbox="289 1556 1409 1625"> <tr><td>(a) Standard or Repetitive Design</td><td>Yes</td></tr> <tr><td>(b) Where Design Was Most Recently Used</td><td>PMRF, HI</td></tr> </table> (3) Total Design Cost (c) = (a)+(b) or (d)+(e) (\$000) <table data-bbox="289 1667 1409 1843"> <tr><td>(a) Production of Plans and Specifications</td><td>9,500</td></tr> <tr><td>(b) All Other Design Costs</td><td>6,300</td></tr> <tr><td>(c) Total Design Costs</td><td>15,800</td></tr> <tr><td>(d) Contract</td><td>11,060</td></tr> <tr><td>(e) In-House</td><td>4,740</td></tr> </table> (4) Contract Award May 2013 (5) Construction Start Jun 2013 (6) Construction Completion Apr 2015			(a) Date Design Started	Sep 2011	(b) Percent Complete as of January 2013	100%	(c) Date 35% Design Complete	Apr 2012	(d) Date Design Complete	Jan 2013	(e) Parametric Cost Estimating Used To Develop Cost	No	(f) Type of Design Contract	Design-Bid-Build	(a) Standard or Repetitive Design	Yes	(b) Where Design Was Most Recently Used	PMRF, HI	(a) Production of Plans and Specifications	9,500	(b) All Other Design Costs	6,300	(c) Total Design Costs	15,800	(d) Contract	11,060	(e) In-House	4,740
(a) Date Design Started	Sep 2011																											
(b) Percent Complete as of January 2013	100%																											
(c) Date 35% Design Complete	Apr 2012																											
(d) Date Design Complete	Jan 2013																											
(e) Parametric Cost Estimating Used To Develop Cost	No																											
(f) Type of Design Contract	Design-Bid-Build																											
(a) Standard or Repetitive Design	Yes																											
(b) Where Design Was Most Recently Used	PMRF, HI																											
(a) Production of Plans and Specifications	9,500																											
(b) All Other Design Costs	6,300																											
(c) Total Design Costs	15,800																											
(d) Contract	11,060																											
(e) In-House	4,740																											

1. COMPONENT MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA	2. DATE Mar 2013
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3. INSTALLATION AND LOCATION  
Deveselu Base, Romania

4. PROJECT TITLE Aegis Ashore Missile Defense System Complex, Increment 2	5. PROJECT NUMBER MDA 646
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12. SUPPLEMENTAL DATA (cont) :

B. Equipment associated with this project which will be provided from other appropriations:

<u>Equipment Nomenclature</u>	<u>Procuring Appropriation</u>	FY <u>Appropriated or Requested</u>	<u>Cost \$(000)</u>
Aegis Weapon System Equipment	RDT&E	FY12/13	241,800
Aegis Ashore Launch Equipment	RDT&E	FY12/13/14/15	36,000
Non-Mission Comms Equipment	RDT&E	FY13/14/15	3,800
Mission Communications Equipment	RDT&E	FY13/14	8,500
Command and Control Equipment	RDT&E	FY12/13/14/15	27,000
Ancillary Equipment	RDT&E	FY11/12	41,500
		SUB-TOTAL	358,600
Extension of Commercial Power	RDT&E	FY/12/13	4,700
		SUB-TOTAL	4,700
Moorestown, NJ**			
Disassembly/pack/ship Deckhouse	RDT&E	FY14	6,245
Installation and reassembly in Romania	RDT&E	FY14/15	10,490
		SUB-TOTAL	16,735
		TOTAL RDT&E	380,035

\*-The RDTE narrative shown above (Block 11) and costs (Block 12, paragraph B) were updated from the DD 1391 included in the FY 2013 MILCON Defense Wide Justification Book in order to clarify the relocation of the Moorestown Deckhouse to Romania.

\*\*-Radar Deckhouse previously acquired as part of MDA project 627

1. COMPONENT MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA			2. DATE Mar 2013	
3. INSTALLATION AND LOCATION Various Worldwide Locations		4. PROJECT TITLE Unspecified Minor Construction			
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE N/A	7. PROJECT NUMBER N/A	8. PROJECT COST (\$000) 2,000		
<b>9. COST ESTIMATES</b>					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Unspecified Minor Construction		LS			2,000
ESTIMATED CONTRACT COST					2,000
CONTINGENCY PERCENT (0.0%)					
SUBTOTAL					2,000
SUPERVISION, INSPECTION & OVERHEAD (0.0%)					0
TOTAL REQUEST					2,000
TOTAL REQUEST (ROUNDED)					2,000
INSTALLED EQPT-OTHER APPROPRIATIONS					(0)
<b>10. DESCRIPTION OF PROPOSED CONSTRUCTION:</b> Provide a lump sum amount for unspecified construction projects, not otherwise authorized by law, having a funded cost of \$2 million or less, including normal construction, alteration or conversion of permanent or temporary facilities and projects having a funded cost of \$3 million or less that are intended solely to correct a deficiency that is life-threatening, health-threatening, or safety-threatening, in accordance with 10 USC Section 2805.					
<b>11. REQUIREMENT:</b> As required  <u>REQUIREMENT:</u> These funds provide MDA the capability to react in FY 2014 to requirements for construction, alteration, or modification of facilities resulting from unforeseen situations affecting mission performance or safety of life or property. Included would be projects to support mission critical research and development requirements of the Ballistic Missile Defense System.					

1. COMPONENT MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA			2. DATE Mar 2013	
3. INSTALLATION AND LOCATION Various Worldwide Locations		4. PROJECT TITLE Planning and Design			
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE N/A	7. PROJECT NUMBER N/A	8. PROJECT COST (\$000) 10,891		
<b>9. COST ESTIMATES</b>					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Planning and Design		LS			10,891
ESTIMATED CONTRACT COST					10,891
CONTINGENCY PERCENT (0.0%)					0
SUBTOTAL					10,891
SUPERVISION, INSPECTION & OVERHEAD (0.0%)					0
TOTAL REQUEST					10,891
TOTAL REQUEST (ROUNDED)					10,891
INSTALLED EQPT-OTHER APPROPRIATIONS					(0)
10. DESCRIPTION OF PROPOSED CONSTRUCTION: The funds requested will be used to provide financing for architectural and engineering services and construction design of Missile Defense Agency (MDA) Military Construction projects.					
11. REQUIREMENT: As required  REQUIREMENT: These planning and design funds are required to initiate and complete design of facilities in the MDA military construction program including unspecified minor construction projects which are anticipated to arise during FY 2014, and accomplish planning and design for future projects with a long lead-time to be included in subsequent MDA Military Construction programs.					



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**Exhibit P-40, Budget Item Justification Sheet: PB 2014 Missile Defense Agency** **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD
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ID Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code B Items: 0603881C, 0603884C	Other Related Program Elements: 0603881C, 0603884C
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**MDAP/MAIS Code(s):**

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	48	44	36	36	-	36	36	36	36	38	143	453
Gross/Weapon System Cost (\$ in Millions)	1,107.323	604.650	460.728	581.005	-	581.005	449.665	490.621	468.607	485.588	1,901.341	6,549.528
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,107.323	604.650	460.728	581.005	-	581.005	449.665	490.621	468.607	485.588	1,901.341	6,549.528
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>1,107.323</b>	<b>604.650</b>	<b>460.728</b>	<b>581.005</b>	<b>-</b>	<b>581.005</b>	<b>449.665</b>	<b>490.621</b>	<b>468.607</b>	<b>485.588</b>	<b>1,901.341</b>	<b>6,549.528</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (Units in Millions)	-	11.607	11.020	10.824	-	10.824	10.737	10.751	10.783	10.839	11.039	-
Gross/Weapon System Unit Cost (Units in Millions)	23.069	13.742	12.798	16.139	-	16.139	12.491	13.628	13.017	12.779	13.296	14.458

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Description:**

The Terminal High Altitude Area Defense (THAAD) is an element of the Terminal Defense Segment (TDS) of the Ballistic Missile Defense System (BMDS). THAAD enhances the TDS by deepening, complementing, and extending the BMDS battlespace and capability to engage ballistic targets in the late mid-course and terminal phases of their trajectory. THAAD Army Navy / Transportable Radar Surveillance- Model 2 (AN/TPY-2) will also be a surveillance sensor, providing sensor data to cue other elements of the BMDS. THAAD, in conjunction with the fielded PATRIOT System, provides the TDS and supports the Missile Defense Agency (MDA) objective of enhancing the BMDS capability. Five major components (Interceptors, Launchers, AN/TPY-2 Radar, THAAD Fire Control and Communication (TFCC), and Peculiar Support Equipment) will be integrated into the THAAD element and the BMDS.

Current Battery definition includes a basic load of 48 interceptors, 6 launchers, 2 Tactical Station Groups (TSGs) and 1 AN/TPY-2 Radar (budgeted separately).

Item Schedule		ID CD	Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
THAAD	P5, P5A, P21	B	23.069	48	1,107.323	-	44	604.650	-	36	460.728	16.139	36	581.005	-	-	-	16.139	36	581.005
<b>Total Gross/Weapon System Cost</b>					<b>1,107.323</b>			<b>604.650</b>			<b>460.728</b>			<b>581.005</b>			<b>-</b>			<b>581.005</b>

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B	<b>Program Elements for Code B Items:</b> 0603881C, 0603884C	<b>Other Related Program Elements:</b> 0603881C, 0603884C
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**MDAP/MAIS Code(s):**

Item Schedule		ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
THAAD	P5, P5A, P21	B	12.491	36	449.665	13.628	36	490.621	13.017	36	468.607	12.779	38	485.588	13.296	143	1,901.341	14.458	453	6,549.528
<b>Total Gross/Weapon System Cost</b>					<b>449.665</b>		<b>490.621</b>			<b>468.607</b>			<b>485.588</b>			<b>1,901.341</b>				<b>6,549.528</b>

\*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P18 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P10.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**

Funding shown above supports the procurement of the listed THAAD Interceptors, Launchers, Tactical Station Groups, new equipment & training devices for the Batteries and Institutional Training Base, all associated peculiar support equipment (to include the Mobile Support Truck, Generator set, spares transport shelter, and the Battery logistics Operation Center), and engineering changes. FY 2012 mitigation of obsolescence components includes a buy of six A-2 Heavy Expanded Mobility Tactical Truck (HEMTT) Transporters to support total Launcher procurement. RDT&E funded tactical hardware (initial two THAAD batteries) are not included in the costs above.

"Procurement Quantity" and "Flyaway Unit Cost" above represent interceptors only, but the "Net Procurement" cost above includes the costs of all hardware. Prior FYs, FY 2012 and FY 2014 funding includes procurement of significant number of ground components, which affects the "Gross Weapon System Unit Cost".

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>										<b>Date:</b> April 2013		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency				<b>MDAP/MAIS Code:</b> 362		<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> THAAD		

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	48	44	36	36	-	36	36	36	36	38	143	453
Gross/Weapon System Cost (\$ in Millions)	1,107.323	604.650	460.728	581.005	-	581.005	449.665	490.621	468.607	485.588	1,901.341	6,549.528
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,107.323	604.650	460.728	581.005	-	581.005	449.665	490.621	468.607	485.588	1,901.341	6,549.528
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>1,107.323</b>	<b>604.650</b>	<b>460.728</b>	<b>581.005</b>	<b>-</b>	<b>581.005</b>	<b>449.665</b>	<b>490.621</b>	<b>468.607</b>	<b>485.588</b>	<b>1,901.341</b>	<b>6,549.528</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (Units in Millions)	23.069	13.742	12.798	16.139	-	16.139	12.491	13.628	13.017	12.779	13.296	14.458

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Cost Elements († indicates the presence of a P-5A)	ID CD	All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Hardware Cost																			
Recurring Cost																			
† Interceptor	B	13.390	48	642.702	11.607	44	510.690	11.020	36	396.707	10.824	36	389.662	-	-	-	10.824	36	389.662
† Launcher	B	9.139	18	164.500	6.125	6	36.751	-	-	-	7.743	6	46.457	-	-	-	7.743	6	46.457
Support Equipment	B	119.761	2	239.521	8.819	1	8.819	1.927	1	1.927	37.231	1	37.231	-	-	-	37.231	1	37.231
† TFCC Tactical Station Group	B	10.100	6	60.600	8.910	2	17.820	-	-	-	9.270	2	18.540	-	-	-	9.270	2	18.540
<i>Total Recurring Cost</i>				1,107.323			574.080			398.634			491.890			-			491.890
<i>Total Hardware Cost</i>				1,107.323			574.080			398.634			491.890			-			491.890
Support Cost																			
Production Support & Testing		0.000	0	0.000	29.545	1	29.545	52.652	1	52.652	42.033	1	42.033	-	-	-	42.033	1	42.033
Training		0.000	0	0.000	1.025	1	1.025	9.442	1	9.442	47.082	1	47.082	-	-	-	47.082	1	47.082
<i>Total Support Cost</i>				0.000			30.570			62.094			89.115			-			89.115
<b>Gross Weapon System Cost</b>				<b>1,107.323</b>			<b>604.650</b>			<b>460.728</b>			<b>581.005</b>			<b>-</b>			<b>581.005</b>

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>													<b>Date:</b> April 2013					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency						<b>MDAP/MAIS Code:</b> 362			<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> THAAD					

Cost Elements († indicates the presence of a P-5A)	ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Hardware Cost																			
Recurring Cost																			
† Interceptor	B	10.737	36	386.517	10.751	36	387.026	10.783	36	388.183	10.794	38	410.171	10.742	143	1,536.072	11.143	453	5,047.730
† Launcher	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.257	30	247.708
Support Equipment	B	3.001	1	3.001	-	-	-	-	-	-	-	-	-	-	-	-	48.417	6	290.499
† TFCC Tactical Station Group	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.696	10	96.960
<b>Total Recurring Cost</b>				<b>389.518</b>		<b>387.026</b>		<b>388.183</b>		<b>410.171</b>		<b>1,536.072</b>		<b>5,682.897</b>					
<b>Total Hardware Cost</b>				<b>389.518</b>		<b>387.026</b>		<b>388.183</b>		<b>410.171</b>		<b>1,536.072</b>		<b>5,682.897</b>					
Support Cost																			
Production Support & Testing		41.059	1	41.059	80.826	1	80.826	70.980	1	70.980	75.417	1	75.417	365.269	1	365.269	94.723	8	757.781
Training		19.088	1	19.088	22.769	1	22.769	9.444	1	9.444	-	-	-	-	-	-	18.142	6	108.850
<b>Total Support Cost</b>				<b>60.147</b>		<b>103.595</b>		<b>80.424</b>		<b>75.417</b>		<b>365.269</b>		<b>866.631</b>					
<b>Gross Weapon System Cost</b>				<b>449.665</b>		<b>490.621</b>		<b>468.607</b>		<b>485.588</b>		<b>1,901.341</b>		<b>6,549.528</b>					

**P-5 Remarks:**

"Procurement Quantity" above represents interceptors only, but the "Net Procurement" cost above includes the costs of all hardware. Prior FYs, FY 2012 and FY 2014 funding includes procurement of significant number of ground components, which affects the "Gross Weapon System Unit Cost".

- Support Equipment captures miscellaneous items such as THAAD Active Leak Sensor System (TALSS) and Battery Support Center (BSC) that support the THAAD Batteries and varies from year to year.

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**Exhibit P-5A, Budget Procurement History and Planning:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD	<b>Item Nomenclature:</b> THAAD
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Cost Elements († indicates the presence of a P-21)	O C O	FY	Contractor and Location	Method/Type, or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
†Interceptor, Lot 1		2010	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Mar 2011	Jul 2012	26	14.480	Y		Oct 2009
†Interceptor, Lot 2		2011	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Mar 2011	Jul 2013	22	12.100	Y		Oct 2009
†Interceptor, Lot 4		2012	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Aug 2012	Oct 2014	44	11.610	Y		Aug 2011
†Interceptor, Lot 5		2013	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Jul 2013	Oct 2015	36	11.020	Y		
†Interceptor, Lot 6		2014	Lockheed Martin / Troy, AL	SS / FFP	MDA, Huntsville, AL	Jan 2014	Jul 2016	36	10.820	Y		Jan 2013
†Launcher, Lot 1		2010	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	May 2011	Apr 2013	6	9.170	Y		Oct 2009
†Launcher, Lot 2		2011	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	May 2011	Oct 2013	6	9.130	Y		Oct 2009
†Launcher, Lot 3		2011	Lockheed Martin / Camden, AR	SS / FPIF	MDA, Huntsville, AL	Jul 2012	May 2014	6	9.130	Y		Aug 2011
†Launcher, Lot 4		2012	Lockheed Martin / Camden, AR	SS / FPIF	MDA, Huntsville, AL	Jul 2012	Nov 2014	6	7.490	Y		Aug 2011
†Launcher, Lot 6		2014	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Jan 2014	Oct 2015	6	9.190	Y		Jan 2013
†TFCC Tactical Station Group, Lot 2		2011	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Mar 2011	May 2013	4	10.100	Y		Oct 2009
†TFCC Tactical Station Group, Lot 3		2011	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Jul 2012	Aug 2014	2	10.100	Y		Aug 2011
†TFCC Tactical Station Group, Lot 4		2012	Lockheed Martin / Camden, AR	SS / FPIF	MDA, Huntsville, AL	Jul 2012	Oct 2014	2	9.260	Y		Aug 2011
†TFCC Tactical Station Group, Lot 6		2014	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Jan 2014	Jan 2016	2	9.270	Y		Jan 2013

**Remarks:**  
 - Lot 3 Interceptors were removed due to Congressional Mark in FY11.  
 - Lot numbers relate to groupings in fiscal years and no Launcher or TFCC Tactical Station Groups were scheduled for procurement in FY13, therefore Lot 5 is an interceptor only Lot.  
 - Delivery of Battery 3 completes in FY13.  
 - Delivery of Battery 4 completes in FY14.  
 - Delivery of Battery 5 completes in FY15.  
 - Delivery of Battery 6 completes in FY16.

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<b>Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency</b>																				<b>Date:</b> April 2013									
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency										<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD										<b>Item Nomenclature:</b> THAAD									

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2011														Fiscal Year 2012														
O C C O	M F R #	FY	SERVICE <sup>‡</sup>	PROC QTY	ACCEP PRIOR TO 1 OCT 2010	BAL DUE AS OF 1 OCT	Calendar Year 2011														Calendar Year 2012													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			
Interceptor - Lot 1																																		
	1	2010	MDA	26	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	25
Interceptor - Lot 2																																		
	2	2011	MDA	22	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Interceptor - Lot 4																																		
	3	2012	MDA	44	-	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44
Interceptor - Lot 5																																		
	4	2013	MDA	36	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36
Interceptor - Lot 6																																		
	5	2014	MDA	36	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36
Launcher - Lot 1																																		
	6	2010	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Launcher - Lot 2																																		
	7	2011	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Launcher - Lot 3																																		
	8	2011	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Launcher - Lot 4																																		
	9	2012	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Launcher - Lot 6																																		
	10	2014	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
TFCC Tactical Station Group - Lot 2																																		
	11	2011	MDA	4	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
TFCC Tactical Station Group - Lot 3																																		
	12	2011	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
TFCC Tactical Station Group - Lot 4																																		
	13	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
TFCC Tactical Station Group - Lot 6																																		
	14	2014	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			



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<b>Exhibit P-21, Budget Production Schedule:</b> PB 2014 Missile Defense Agency														<b>Date:</b> April 2013															
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency										<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD										<b>Item Nomenclature:</b> THAAD									

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2015														Fiscal Year 2016														
O C C O	M F R #	FY	SERVICE <sup>±</sup>	PROC QTY	ACCEP PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015														Calendar Year 2016													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			
Interceptor - Lot 1																																		
	1	2010	MDA	26	26	-																								-				
Interceptor - Lot 2																																		
	2	2011	MDA	22	22	-																								-				
Interceptor - Lot 4																																		
	3	2012	MDA	44	-	44	2	3	3	4	4	4	4	4	4	4	4													-				
Interceptor - Lot 5																																		
	4	2013	MDA	36	-	36	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4		-				
Interceptor - Lot 6																																		
	5	2014	MDA	36	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	24			
Launcher - Lot 1																																		
	6	2010	MDA	6	6	-																								-				
Launcher - Lot 2																																		
	7	2011	MDA	6	6	-																								-				
Launcher - Lot 3																																		
	8	2011	MDA	6	5	1	1																							-				
Launcher - Lot 4																																		
	9	2012	MDA	6	-	6	-	1	1	1	1	1	1																	-				
Launcher - Lot 6																																		
	10	2014	MDA	6	-	6	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1						-				
TFCC Tactical Station Group - Lot 2																																		
	11	2011	MDA	4	4	-																								-				
TFCC Tactical Station Group - Lot 3																																		
	12	2011	MDA	2	2	-																								-				
TFCC Tactical Station Group - Lot 4																																		
	13	2012	MDA	2	-	2	1	1																						-				
TFCC Tactical Station Group - Lot 6																																		
	14	2014	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1							-				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L			





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<b>Exhibit P-21, Budget Production Schedule:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD07 - THAAD	<b>Item Nomenclature:</b> THAAD

MFR #	MFR Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR	1-8-5	MAX	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	Lockheed Martin - Troy, AL	12.00	48.00	60.00	6	6	16	22	6	4	27	31
2	Lockheed Martin - Troy, AL	12.00	48.00	60.00	6	6	28	34	6	4	27	31
3	Lockheed Martin - Troy, AL	12.00	48.00	60.00	6	11	26	37	6	4	27	31
4	Lockheed Martin - Troy, AL	12.00	48.00	60.00	6	10	27	37	6	4	27	31
5	Lockheed Martin - Troy, AL	12.00	48.00	60.00	6	4	30	34	6	4	27	31
6	Lockheed Martin - Camden, AR	12.00	12.00	24.00	6	8	23	31	6	4	21	25
7	Lockheed Martin - Camden, AR	12.00	12.00	24.00	6	8	29	37	6	4	21	25
8	Lockheed Martin - Camden, AR	12.00	12.00	24.00	6	10	22	32	6	4	21	25
9	Lockheed Martin - Camden, AR	12.00	12.00	24.00	6	10	28	38	6	3	21	24
10	Lockheed Martin - Camden, AR	12.00	12.00	24.00	6	4	21	25	6	4	21	25
11	Lockheed Martin - Camden, AR	8.00	8.00	8.00	6	6	26	32	6	4	24	28
12	Lockheed Martin - Camden, AR	8.00	8.00	8.00	6	10	25	35	6	4	24	28
13	Lockheed Martin - Camden, AR	8.00	8.00	8.00	6	10	27	37	6	3	24	27
14	Lockheed Martin - Camden, AR	8.00	8.00	8.00	6	4	24	28	6	4	24	28

**Remarks:**

- Production Rates listed above are Units/Year.  
 - Concurrent with the FY12-FY15 U.S. procurements, MDA THAAD is executing a Foreign Military Sales (FMS) Case for 2 Batteries and 96 Interceptors.  
 - Manufacturing lead times can vary due to factors such as pursuing multiple lot buys concurrently to achieve price discounts, increasing the lead time of the second simultaneously awarded lot buy.  
 - Interceptor Lots 5 and 6 are delivered on a 9 month schedule to mitigate delayed contract award of Lot 4 and deliver interceptors to fill Batteries.  
 "A" in the Delivery Schedule indicated the Contract Award Date.  
 Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 99,999, all quantities are shown as each. If the maximum quantity is between 100,000 and 99,999,499 all quantities are shown in thousands (rounded to the nearest thousand). If the maximum quantity is greater than 99,999,499 all quantities are shown in millions (rounded to the nearest million).

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B	<b>Program Elements for Code B Items:</b> 0604881C, 0604880C, 0603892C	<b>Other Related Program Elements:</b> 0603892C, 0604881C, 0604880C
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**MDAP/MAIS Code(s):**

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	41	28	29	52	-	52	72	72	84	88	-	466
Gross/Weapon System Cost <i>(\$ in Millions)</i>	610.837	378.393	389.626	580.814	-	580.814	746.712	745.259	1,018.243	1,093.968	-	5,563.852
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	610.837	378.393	389.626	580.814	-	580.814	746.712	745.259	1,018.243	1,093.968	-	5,563.852
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority <i>(\$ in Millions)</i></b>	<b>610.837</b>	<b>378.393</b>	<b>389.626</b>	<b>580.814</b>	<b>-</b>	<b>580.814</b>	<b>746.712</b>	<b>745.259</b>	<b>1,018.243</b>	<b>1,093.968</b>	<b>-</b>	<b>5,563.852</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(Units in Millions)</i>	14.898	12.291	11.116	10.070	-	10.070	9.480	9.374	11.272	11.605	Continuing	Continuing
Gross/Weapon System Unit Cost <i>(Units in Millions)</i>	14.898	13.514	13.435	11.170	-	11.170	10.371	10.351	12.122	12.431	-	11.940

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Description:**

The SM-3 Block IA provides increased capability, over the SM-2 Block IV and SM-3 Block I, to engage short-to intermediate-range ballistic missiles. The SM-3 Block IA incorporates rocket motor upgrades and computer program modifications to improve sensor performance, missile guidance and control, and lower cost. It also includes producibility and maintainability features required to qualify the missile as a tactical fleet asset. The Weapon System Procurement unit cost includes production support and canisters.

The SM-3 Block IB will incorporate a two-color, all reflective infrared seeker, enabling longer range acquisition and increased threat discrimination. A Throttleable Divert Altitude Control System (TDACS) will provide a more flexible and lower cost alternative to the Solid Divert Altitude Control System (SDACS). Initial production of the SM-3 Blk IB began in FY 2012 (qty 12) with larger rate production planned in FY 2013 (qty 29) and FY 2014 (qty 52).

Prior Year Procurement quantity: A total of 41 SM-3 Block IA's appropriated in FY 2008, 2009, 2010 and 2011. The SM-3 Block IA's were transitioned from RDT&E to Procurement, Defense-Wide in FY 2009 utilizing funding from both appropriations. In FY 2012 14 SM-3 Block IA's were procured in a split buy which included 14 SM-3 Block IB's.

FY 2017 Fly Away Unit Cost consists of 72 SM-3 Block IB's for 9.014 (\$649.030M) and 12 SM-3 Block IIA's for 24.818 (\$297.816M)

FY 2018 Fly Away Unit Cost consists of 72 SM-3 Block IB's for 9.014 (\$649.032M) and 16 SM-3 Block IIA's for 23.266 (\$372.251M)

FY 2017 Gross/Weapon System Cost consists of 9.897 (\$712.613M/72) for SM-3 Block IB's and 25.469 (\$305.630M/12) for SM-3 Block IIA's

FY 2018 Gross/Weapon System Cost consists of 9.877 (\$711.121M/72) for SM-3 Block IB's and 23.928 (\$382.846M/16) for SM-3 Block IIA's

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B	<b>Program Elements for Code B Items:</b> 0604881C, 0604880C, 0603892C	<b>Other Related Program Elements:</b> 0603892C, 0604881C, 0604880C
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**MDAP/MAIS Code(s):**

Item Schedule		ID CD	Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Aegis BMD	P5, P5A, P21	B	14.898	41	610.837	-	28	378.393	-	29	389.626	11.170	52	580.814	-	-	-	11.170	52	580.814
<b>Total Gross/Weapon System Cost</b>					<b>610.837</b>		<b>378.393</b>			<b>389.626</b>			<b>580.814</b>			<b>-</b>				<b>580.814</b>

  

Item Schedule		ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Aegis BMD	P5, P5A, P21	B	10.371	72	746.712	10.351	72	745.259	12.122	84	1,018.243	12.431	88	1,093.968	-	-	-	11.940	466	5,563.852
<b>Total Gross/Weapon System Cost</b>					<b>746.712</b>		<b>745.259</b>			<b>1,018.243</b>			<b>1,093.968</b>			<b>-</b>				<b>5,563.852</b>

\*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P18 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P10.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**  
 FY 2011: Full funding for 23 SM-3 Block IA's for delivery in FY 2014  
 FY 2012: Full funding for 14 SM-3 Block IA's and 14 SM-3 Block IB's for delivery in FY 2014 through FY 2015  
 FY 2013: Full funding for 29 SM-3 Block IB's for delivery in FY 2015  
 FY 2014: Full funding for 52 SM-3 Block IB's for delivery in FY 2016

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>										<b>Date:</b> April 2013	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency				<b>MDAP/MAIS Code:</b> 362		<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> Aegis BMD	

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	41	28	29	52	-	52	72	72	84	88	-	466
Gross/Weapon System Cost (\$ in Millions)	610.837	378.393	389.626	580.814	-	580.814	746.712	745.259	1,018.243	1,093.968	-	5,563.852
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	610.837	378.393	389.626	580.814	-	580.814	746.712	745.259	1,018.243	1,093.968	-	5,563.852
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>610.837</b>	<b>378.393</b>	<b>389.626</b>	<b>580.814</b>	<b>-</b>	<b>580.814</b>	<b>746.712</b>	<b>745.259</b>	<b>1,018.243</b>	<b>1,093.968</b>	<b>-</b>	<b>5,563.852</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (Units in Millions)	14.898	13.514	13.435	11.170	-	11.170	10.371	10.351	12.122	12.431	-	11.940

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Cost Elements († indicates the presence of a P-5A)	ID CD	All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Flyaway Cost																			
Recurring Cost																			
† SM-3 Block IA Procurement	B	14.898	41	610.837	11.138	14	155.928	-	-	-	-	-	-	-	-	-	-	-	-
† SM-3 Block IB Procurement	B	0.000	0	0.000	13.402	14	187.625	11.116	29	322.351	10.070	52	523.641	-	-	-	10.070	52	523.641
SM-3 Block IIA	B	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Recurring Cost</b>				<b>610.837</b>			<b>343.553</b>			<b>322.351</b>			<b>523.641</b>						<b>523.641</b>
<b>Total Flyaway Cost</b>				<b>610.837</b>			<b>343.553</b>			<b>322.351</b>			<b>523.641</b>						<b>523.641</b>
Hardware Cost																			
Recurring Cost																			
ABMD 3.6.1 Hardware and Installs	B	0.000	0	0.000	15.000	1	15.000	7.500	1	7.500	-	-	-	-	-	-	-	-	-
Canisters Procurement SM-3 Block IA/IB	B	0.000	0	0.000	0.265	28	7.419	0.807	29	23.400	0.349	52	18.173	-	-	-	0.349	52	18.173
Canisters Procurement SM-3 Block IIA	B	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Recurring Cost</b>				<b>0.000</b>			<b>22.419</b>			<b>30.900</b>			<b>18.173</b>						<b>18.173</b>
<b>Total Hardware Cost</b>				<b>0.000</b>			<b>22.419</b>			<b>30.900</b>			<b>18.173</b>						<b>18.173</b>

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>														<b>Date:</b> April 2013					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency							<b>MDAP/MAIS Code:</b> 362			<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> Aegis BMD					

Cost Elements († indicates the presence of a P-5A)	ID CD	All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Support Cost																			
SM-3 Production Engineering		0.000	0	0.000	12.421	1	12.421	36.375	1	36.375	39.000	1	39.000	-	-	-	39.000	1	39.000
<b>Total Support Cost</b>				0.000			12.421			36.375			39.000			-			39.000
<b>Gross Weapon System Cost</b>				610.837			378.393			389.626			580.814			-			580.814

Cost Elements († indicates the presence of a P-5A)	ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Flyaway Cost																			
Recurring Cost																			
† SM-3 Block IA Procurement	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.941	55	766.765
† SM-3 Block IB Procurement	B	9.480	72	682.528	9.374	72	674.948	9.014	72	649.030	9.014	72	649.032	-	-	-	9.632	383	3,689.155
SM-3 Block IIA	B	-	-	-	-	-	-	24.818	12	297.816	23.266	16	372.251	-	-	-	23.931	28	670.067
<b>Total Recurring Cost</b>				682.528			674.948			946.846			1,021.283			-			5,125.987
<b>Total Flyaway Cost</b>				682.528			674.948			946.846			1,021.283			-			5,125.987
Hardware Cost																			
Recurring Cost																			
ABMD 3.6.1 Hardware and Installs	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.250	2	22.500
Canisters Procurement SM-3 Block IA/IB	B	0.285	72	20.499	0.327	72	23.571	0.350	72	25.208	0.313	72	22.564	-	-	-	0.355	397	140.834
Canisters Procurement SM-3 Block IIA	B	-	-	-	-	-	-	0.651	12	7.814	0.662	16	10.595	-	-	-	0.657	28	18.409
<b>Total Recurring Cost</b>				20.499			23.571			33.022			33.159			-			181.743
<b>Total Hardware Cost</b>				20.499			23.571			33.022			33.159			-			181.743
Support Cost																			
SM-3 Production Engineering		43.685	1	43.685	46.740	1	46.740	38.375	1	38.375	39.526	1	39.526	-	-	-	36.589	7	256.122
<b>Total Support Cost</b>				43.685			46.740			38.375			39.526			-			256.122
<b>Gross Weapon System Cost</b>				746.712			745.259			1,018.243			1,093.968			-			5,563.852

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<b>Exhibit P-5, Cost Analysis:</b> PB 2014 Missile Defense Agency			<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>MDAP/MAIS Code:</b> 362	<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD	<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> Aegis BMD

**P-5 Remarks:**

N/A

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**Exhibit P-5A, Budget Procurement History and Planning:** PB 2014 Missile Defense Agency **Date:** April 2013

**Appropriation / Budget Activity / Budget Sub Activity:**  
0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency

**P-1 Line Item Nomenclature:**  
MD09 - AEGIS BMD

**Item Nomenclature:**  
Aegis BMD

<b>Cost Elements</b> († indicates the presence of a P-21)	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type, or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty</b> (Each)	<b>Unit Cost</b> (\$ M)	<b>Specs Avail Now?</b>	<b>Date Revsn Avail</b>	<b>RFP Issue Date</b>
†SM-3 Block IA Procurement		2011	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Jan 2011	Oct 2013	23	10.310	Y		Nov 2010
†SM-3 Block IA Procurement		2012	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Jan 2012	Jul 2014	14	11.140	Y		Aug 2011
†SM-3 Block IB Procurement		2012	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Oct 2011	Oct 2013	14	13.400	Y		Aug 2011
†SM-3 Block IB Procurement		2013	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Oct 2012	Oct 2014	29	11.120	Y		Aug 2012
†SM-3 Block IB Procurement		2014	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Oct 2013	Oct 2015	52	10.070	Y		Aug 2013



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<b>Exhibit P-21, Budget Production Schedule:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency		<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD
		<b>Item Nomenclature:</b> Aegis BMD

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2011														Fiscal Year 2012																																				
O C C O	M F R #	FY	SERVICE <sup>±</sup>	PROC QTY	ACCEP PRIOR TO 1 OCT 2010	BAL DUE AS OF 1 OCT	Calendar Year 2011														Calendar Year 2012																																			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L																									
SM-3 Block IA Procurement																																																								
All Prior Years Deliveries: 18																																																								
	1	2011	MDA	23	-	23	-	-	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23																					
	2	2012	MDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14																					
SM-3 Block IB Procurement																																																								
	3	2012	MDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14																					
	3	2013	MDA	29	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29																					
	3	2014	MDA	52	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52																					
<table border="1" style="width:100%; border-collapse: collapse; font-size: 8px;"> <tr> <td>O C T</td> <td>N O V</td> <td>D E C</td> <td>J A N</td> <td>F E B</td> <td>M A R</td> <td>A P R</td> <td>M A Y</td> <td>J U N</td> <td>J U L</td> <td>A U G</td> <td>S E P</td> <td>O C T</td> <td>N O V</td> <td>D E C</td> <td>J A N</td> <td>F E B</td> <td>M A R</td> <td>A P R</td> <td>M A Y</td> <td>J U N</td> <td>J U L</td> <td>A U G</td> <td>S E P</td> <td>B A L</td> </tr> </table>																																O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L
O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L																																

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<b>Exhibit P-21, Budget Production Schedule:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency		<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD
		<b>Item Nomenclature:</b> Aegis BMD

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2013												Fiscal Year 2014																				
O C C O	M F R #	FY	SERVICE <sup>±</sup>	PROC QTY	ACCEP PRIOR TO 1 OCT 2012	BAL DUE AS OF 1 OCT	Calendar Year 2013												Calendar Year 2014																			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L							
SM-3 Block IA Procurement																																						
All Prior Years Deliveries: 18																																						
	1	2011	MDA	23	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	4	4	4	4	4												
	2	2012	MDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	9
SM-3 Block IB Procurement																																						
	3	2012	MDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3	-	-	-	1	2	2										
	3	2013	MDA	29	-	29	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29
	3	2014	MDA	52	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L							



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<b>Exhibit P-21, Budget Production Schedule:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD09 - AEGIS BMD	<b>Item Nomenclature:</b> Aegis BMD

MFR #	MFR Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR	1-8-5	MAX	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	Raytheon - Tucson, AZ	1.00	4.00	8.00	4	-	30	30	4	-	30	30
2	Raytheon - Tucson, AZ	1.00	4.00	8.00	4	1	24	25	4	-	24	24
3	Raytheon - Tucson, AZ	1.00	4.00	8.00	4	-	24	24	4	-	24	24

"A" in the Delivery Schedule indicated the Contract Award Date.

Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 99,999, all quantities are shown as each. If the maximum quantity is between 100,000 and 99,999,499 all quantities are shown in thousands (rounded to the nearest thousand). If the maximum quantity is greater than 99,999,499 all quantities are shown in millions (rounded to the nearest million).

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars
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ID Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code B Items: 0603884C, 0603881C	Other Related Program Elements: 0603881C, 0603884C
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**MDAP/MAIS Code(s):**

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	1	2	1	-	-	-	-	-	-	-	-	4
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	191.081	380.195	217.244	62.000	-	62.000	80.250	21.000	35.000	35.000	-	1,021.770
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) ( <i>\$ in Millions</i> )	191.081	380.195	217.244	62.000	-	62.000	80.250	21.000	35.000	35.000	-	1,021.770
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>191.081</b>	<b>380.195</b>	<b>217.244</b>	<b>62.000</b>	<b>-</b>	<b>62.000</b>	<b>80.250</b>	<b>21.000</b>	<b>35.000</b>	<b>35.000</b>	<b>-</b>	<b>1,021.770</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares ( <i>\$ in Millions</i> )	-	-	10.177	-	-	-	-	-	-	-	-	10.177
Flyaway Unit Cost ( <i>Units in Millions</i> )	191.081	182.098	200.050	62.000	-	62.000	80.250	21.000	35.000	35.000	Continuing	Continuing
Gross/Weapon System Unit Cost ( <i>Units in Millions</i> )	191.081	190.098	217.244	-	-	-	-	-	-	-	-	255.443

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Description:**

The Army Navy/Transportable Radar Surveillance and Control (AN/TPY-2) radar is an integral component of the Ballistic Missile Defense System (BMDS) layered network of sensors. It is easily transported and can be configured to operate either as a Terminal High Altitude Area Defense (THAAD) Fire Unit Radar (terminal mode) or Forward-Based Radar. The forward-based AN/TPY-2 provides detection and tracking during the boost phase. This significantly reduces the uncertainty in target discrimination and reaction time, increasing the probability of a successful BMDS engagement. In forward-based mode, the AN/TPY-2 also provides acquisition and track data via the Ballistic Missile Defense System Command, Control, Battle Management and Communications and Link 16 to the Aegis missile defense system for cueing. The AN/TPY-2 used in terminal mode is an integral component of the THAAD Battery. The THAAD battery radar is capable of tracking multiple threats and multiple interceptors during engagements in the terminal phase. It provides surveillance, acquisition, track, discrimination, interceptor communications, and hit assessment data collection for fire control.

Procurement funding procures three AN/TPY-2 Radars required to complete THAAD Battery acquisitions. "Procurement Quantity" and "Flyaway Unit Cost" above represent radar systems only, but the "Net Procurement" cost above plus the Initial Spares amount includes the costs of all hardware. FY 2013 funding includes procurement of one (1) AN/TPY-2 Radar and three (3) additional Prime Power Units (PPUs), which affects the "Gross Weapon System Unit Cost". The FY 2013 flyaway unit cost of \$200.050M consists of \$189.873M for the radar, plus \$10.177M for initial spares (depicted on P-40 for BMDS Radars Initial Spares). The Gross Weapon System Cost of \$217.244 for FY 2013 is comprised of the \$189.873M for the radar, plus \$27.371M is required for acquisition of the three additional Prime Power Units. For FY 2014 funding includes procurement of one Float Cooling Equipment Unit (CEU), Critical Spares and long lead Transmit/Receive Integrated Microwave Modules (TRIMMs) for the Float Antenna Equipment Unit (AEU). The FY 2014 flyaway unit cost is \$62.000M.

FY 2015 funding includes procurement of one Float AEU structure, population of long lead TRIMMs and final delivery plus procurement and installation of one Electronic Equipment Unit (EEU) Modification Kit. FY 2016-2018 funding includes the procurement and installation of EEU Modification Kits, Critical Spares, one Float EEU and two PPUs.

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars
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**ID Code** (A=Service Ready, B=Not Service Ready) : B **Program Elements for Code B Items:** 0603884C, 0603881C **Other Related Program Elements:** 0603881C, 0603884C

**MDAP/MAIS Code(s):**

Item Schedule		ID CD	Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
BMDS AN/TPY-2 Radars	P5, P5A, P21	B	191.081	1	191.081	-	2	380.195	-	1	217.244	-	-	62.000	-	-	-	-	-	62.000
<b>Total Gross/Weapon System Cost</b>					<b>191.081</b>		<b>380.195</b>			<b>217.244</b>			<b>62.000</b>			<b>-</b>				<b>62.000</b>

Item Schedule		ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
BMDS AN/TPY-2 Radars	P5, P5A, P21	B	-	-	80.250	-	-	21.000	-	-	35.000	-	-	35.000	-	-	-	255.443	4	1,021.770
<b>Total Gross/Weapon System Cost</b>					<b>80.250</b>		<b>21.000</b>			<b>35.000</b>			<b>35.000</b>			<b>-</b>				<b>1,021.770</b>

\*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P18 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P10.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**

FY 2012: Procure two AN/TPY-2 Radars, plus one Float Cooling Equipment Unit (CEU) and one Float Electronic Equipment Unit (EEU)  
 FY 2013: Procure one AN/TPY-2 Radar, plus three additional Prime Power Units (PPUs)  
 FY 2014: Procure long lead TRIMMs for Float AEU, plus one Float CEU and Critical Spares

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>										<b>Date:</b> April 2013		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency				<b>MDAP/MAIS Code:</b> 362		<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> BMDS AN/TPY-2 Radars		

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	1	2	1	-	-	-	-	-	-	-	-	4
Gross/Weapon System Cost (\$ in Millions)	191.081	380.195	217.244	62.000	-	62.000	80.250	21.000	35.000	35.000	-	1,021.770
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	191.081	380.195	217.244	62.000	-	62.000	80.250	21.000	35.000	35.000	-	1,021.770
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>191.081</b>	<b>380.195</b>	<b>217.244</b>	<b>62.000</b>	<b>-</b>	<b>62.000</b>	<b>80.250</b>	<b>21.000</b>	<b>35.000</b>	<b>35.000</b>	<b>-</b>	<b>1,021.770</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (Units in Millions)	191.081	190.098	217.244	-	-	-	-	-	-	-	-	255.443

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Cost Elements († indicates the presence of a P-5A)	ID CD	All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Hardware Cost																			
Recurring Cost																			
† Antenna Equipment Unit (AEU)	B	144.285	1	144.285	127.663	2	255.326	143.302	1	143.302	-	-	-	-	-	-	-	-	-
† Cooling Equipment Unit (CEU)	B	7.800	1	7.800	6.789	2	13.578	7.800	1	7.800	-	-	-	-	-	-	-	-	-
† Critical Spares	B	0.000	0	0.000	-	-	-	-	-	-	6.200	1	6.200	-	-	-	6.200	1	6.200
† Electronic Equipment Unit (EEU)	B	23.398	1	23.398	20.367	2	40.734	23.190	1	23.190	-	-	-	-	-	-	-	-	-
† Electronic Equipment Unit (EEU) Modification Kit	B	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
† Float Antenna Equipment Unit (AEU)	B	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
† Float Cooling Equipment Unit (CEU)	B	0.000	0	0.000	7.136	1	7.136	-	-	-	7.800	1	7.800	-	-	-	7.800	1	7.800
† Float Electronic Equipment Unit (EEU)	B	0.000	0	0.000	20.264	1	20.264	-	-	-	-	-	-	-	-	-	-	-	-
† Forward-Based Mode Prime Power Units (PPU)	B	0.000	0	0.000	-	-	-	9.124	3	27.371	-	-	-	-	-	-	-	-	-

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>													<b>Date:</b> April 2013						
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency					<b>MDAP/MAIS Code:</b> 362			<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars					<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> BMDS AN/TPY-2 Radars						

Cost Elements († indicates the presence of a P-5A)	ID CD	All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
† Prime Power Unit (PPUs - 2 each radar system)	B	15.598	1	15.598	13.579	2	27.157	15.581	1	15.581	-	-	-	-	-	-	-	-	-
† Transmit/Receive Integrated Microwave Module (TRIMMs)	B	0.000	0	0.000	-	-	-	-	-	-	48.000	1	48.000	-	-	-	48.000	1	48.000
<b>Total Recurring Cost</b>				<b>191.081</b>			<b>364.195</b>			<b>217.244</b>			<b>62.000</b>			<b>-</b>			<b>62.000</b>
<b>Total Hardware Cost</b>				<b>191.081</b>			<b>364.195</b>			<b>217.244</b>			<b>62.000</b>			<b>-</b>			<b>62.000</b>
<b>Support Cost</b>																			
Program Support*		0.000	0	0.000	16.000	1	16.000	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Support Cost</b>				<b>0.000</b>			<b>16.000</b>			<b>-</b>			<b>-</b>			<b>-</b>			<b>-</b>
<b>Gross Weapon System Cost</b>				<b>191.081</b>			<b>380.195</b>			<b>217.244</b>			<b>62.000</b>			<b>-</b>			<b>62.000</b>

Cost Elements († indicates the presence of a P-5A)	ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
<b>Hardware Cost</b>																			
<b>Recurring Cost</b>																			
† Antenna Equipment Unit (AEU)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	135.728	4	542.913
† Cooling Equipment Unit (CEU)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.295	4	29.178
† Critical Spares	B	-	-	-	7.000	1	7.000	-	-	-	-	-	-	-	-	-	6.600	2	13.200
† Electronic Equipment Unit (EEU)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.831	4	87.322
† Electronic Equipment Unit (EEU) Modification Kit	B	7.000	1	7.000	7.000	2	14.000	7.000	2	14.000	7.000	2	14.000	-	-	-	7.000	7	49.000
† Float Antenna Equipment Unit (AEU)	B	73.250	1	73.250	-	-	-	-	-	-	-	-	-	-	-	-	73.250	1	73.250
† Float Cooling Equipment Unit (CEU)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.468	2	14.936
† Float Electronic Equipment Unit (EEU)	B	-	-	-	-	-	-	21.000	1	21.000	-	-	-	-	-	-	20.632	2	41.264
† Forward-Based Mode Prime Power Units (PPU)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.124	3	27.371



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<b>Exhibit P-5, Cost Analysis:</b> PB 2014 Missile Defense Agency													<b>Date:</b> April 2013					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency					<b>MDAP/MAIS Code:</b> 362			<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars					<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> BMDS AN/TPY-2 Radars					

Cost Elements († indicates the presence of a P-5A)	ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
† Prime Power Unit (PPUs - 2 each radar system)	B	-	-	-	-	-	-	-	-	-	10.500	2	21.000	-	-	-	13.223	6	79.336
† Transmit/Receive Integrated Microwave Module (TRIMMs)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48.000	1	48.000
<i>Total Recurring Cost</i>				80.250			21.000			35.000			35.000			-			1,005.770
<i>Total Hardware Cost</i>				80.250			21.000			35.000			35.000			-			1,005.770
Support Cost																			
Program Support*		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.000	1	16.000
<i>Total Support Cost</i>				-			-			-			-			-			16.000
<b>Gross Weapon System Cost</b>				<b>80.250</b>			<b>21.000</b>			<b>35.000</b>			<b>35.000</b>			-			<b>1,021.770</b>

**P-5 Remarks:**  
N/A

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**Exhibit P-5A, Budget Procurement History and Planning:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars	<b>Item Nomenclature:</b> BMDS AN/TPY-2 Radars
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Cost Elements († indicates the presence of a P-21)	O C O	FY	Contractor and Location	Method/Type, or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
†Antenna Equipment Unit (AEU)		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	144.290	Y		
†Antenna Equipment Unit (AEU)		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	144.090	Y		
†Antenna Equipment Unit (AEU)		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	143.300	Y		
†Cooling Equipment Unit (CEU)		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	7.800	Y		
†Cooling Equipment Unit (CEU)		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	7.668	Y		
†Cooling Equipment Unit (CEU)		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	7.800	Y		
†Critical Spares		2014	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2013	Dec 2014	1	6.200	Y		
†Critical Spares		2016	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2015	Dec 2016	1	7.000	Y		
†Electronic Equipment Unit (EEU)		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	23.400	Y		
†Electronic Equipment Unit (EEU)		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	23.000	Y		
†Electronic Equipment Unit (EEU)		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	23.190	Y		
†Electronic Equipment Unit (EEU) Modification Kit		2015	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2014	Jun 2015	1	7.000	Y		
†Electronic Equipment Unit (EEU) Modification Kit		2016	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2015	Jun 2016	2	7.000	Y		
†Electronic Equipment Unit (EEU) Modification Kit		2017	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2016	Jun 2017	2	7.000	Y		
†Electronic Equipment Unit (EEU) Modification Kit		2018	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2017	Jun 2018	2	7.000	Y		
†Float Antenna Equipment Unit (AEU)		2015	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2014	Jun 2017	1	73.250	Y		
†Float Cooling Equipment Unit (CEU)		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	1	7.140	Y		
†Float Cooling Equipment Unit (CEU)		2014	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2013	Jun 2016	1	7.800	Y		
†Float Electronic Equipment Unit (EEU)		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	1	20.260	Y		

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**Exhibit P-5A, Budget Procurement History and Planning:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars	<b>Item Nomenclature:</b> BMDS AN/TPY-2 Radars
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Cost Elements <small>(† indicates the presence of a P-21)</small>	O C O	FY	Contractor and Location	Method/Type, or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <small>(Each)</small>	Unit Cost <small>(\$ M)</small>	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
†Float Electronic Equipment Unit (EEU)		2017	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2016	Jun 2019	1	21.000	Y		
†Forward-Based Mode Prime Power Units (PPU)		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Dec 2014	3	9.120	Y		
†Prime Power Unit (PPUs - 2 each radar system)		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	15.600	Y		
†Prime Power Unit (PPUs - 2 each radar system)		2012	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2011	Jun 2014	2	15.336	Y		
†Prime Power Unit (PPUs - 2 each radar system)		2013	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2012	Jun 2015	1	15.580	Y		
†Prime Power Unit (PPUs - 2 each radar system)		2018	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2017	Jun 2020	2	10.500	Y		
†Transmit/Receive Integrated Microwave Module (TRIMMs)		2014	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Dec 2013	Jun 2015	1	48.000	Y		

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<b>Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency</b>		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency		<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars
		<b>Item Nomenclature:</b> BMDS AN/TPY-2 Radars

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2010													Fiscal Year 2011																
O C C O	M F R #	FY	SERVICE <sup>±</sup>	PROC QTY	ACCEP PRIOR TO 1 OCT 2009	BAL DUE AS OF 1 OCT	Calendar Year 2010													Calendar Year 2011															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L				
Antenna Equipment Unit (AEU)																																			
	1	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	1	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	1	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Cooling Equipment Unit (CEU)																																			
	2	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	2	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	2	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Critical Spares																																			
	3	2014	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	3	2016	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Electronic Equipment Unit (EEU)																																			
	4	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	4	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	4	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Electronic Equipment Unit (EEU) Modification Kit																																			
	5	2015	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	5	2016	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	5	2017	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	5	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
Float Antenna Equipment Unit (AEU)																																			
	6	2015	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Float Cooling Equipment Unit (CEU)																																			
	7	2012	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	7	2014	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Float Electronic Equipment Unit (EEU)																																			
	8	2012	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	8	2017	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Forward-Based Mode Prime Power Units (PPU)																																			
	9	2013	MDA	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
Prime Power Unit (PPUs - 2 each radar system)																																			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L				





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<b>Exhibit P-21, Budget Production Schedule:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars	<b>Item Nomenclature:</b> BMDS AN/TPY-2 Radars

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2012												Fiscal Year 2013												
O C C O	M F R #	FY	SERVICE <sup>±</sup>	PROC QTY	ACCEP PRIOR TO 1 OCT 2011	BAL DUE AS OF 1 OCT	Calendar Year 2012												Calendar Year 2013											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P
	10	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	2012	MDA	2	-	2	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	
	10	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Transmit/Receive Integrated Microwave Module (TRIMMs)																														
	11	2014	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



















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<b>Exhibit P-21, Budget Production Schedule:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD11 - BMDS AN/TPY-2 Radars	<b>Item Nomenclature:</b> BMDS AN/TPY-2 Radars

MFR #	MFR Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR	1-8-5	MAX	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
2	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
3	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	12	14	-	-	-	-
4	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
5	Raytheon - Woburn, MA	1.00	1.00	3.00	4	2	6	8	-	-	-	-
6	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
7	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
8	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
9	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
10	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	30	32	-	-	-	-
11	Raytheon - Woburn, MA	1.00	1.00	4.00	4	2	19	21	-	-	-	-

"A" in the Delivery Schedule indicated the Contract Award Date.

Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 99,999, all quantities are shown as each. If the maximum quantity is between 100,000 and 99,999,499 all quantities are shown in thousands (rounded to the nearest thousand). If the maximum quantity is greater than 99,999,499 all quantities are shown in millions (rounded to the nearest million).



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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD73 - Aegis Ashore Phase III
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ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items: 0208866C	Other Related Program Elements: 0208866C
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**MDAP/MAIS Code(s):**

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	1	-	1	-	-	-	-	-	1
Gross/Weapon System Cost <i>(\$ in Millions)</i>	-	-	-	131.400	-	131.400	256.325	38.574	63.884	71.600	-	561.783
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	-	-	-	131.400	-	131.400	256.325	38.574	63.884	71.600	-	561.783
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority <i>(\$ in Millions)</i></b>	-	-	-	<b>131.400</b>	-	<b>131.400</b>	<b>256.325</b>	<b>38.574</b>	<b>63.884</b>	<b>71.600</b>	-	<b>561.783</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(Units in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(Units in Millions)</i>	-	-	-	131.400	-	131.400	-	-	-	-	-	561.783

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Description:**

This program supports the procurement of a land based Standard Missile (SM)-3 capability, hereafter referred to as Aegis Ashore. On 17 September 2009, the President announced an overarching policy to provide regional missile defense to U.S. deployed forces, allies and partners in Europe called the European Phased Adaptive Approach (EPAA). Within this policy, a European PAA specifically addresses a timeline to deploy a mix of afloat and land-based Ballistic Missile Defense (BMD) capabilities. Aegis Ashore represents one of these land-based capabilities.

Phase III of EPAA (2018 timeframe): Deploys a land based Aegis Ashore in Poland, and introduces an upgraded Standard Missile, the SM-3 Block IIA. This missile brings improved coverage against medium and intermediate range ballistic threats, and extends coverage to the bulk of the European continent.

Aegis Ashore is a key component of Phases II and III in the European PAA and will provide Aegis Missile Defense capability against short and medium range ballistic missiles in an ashore configuration. It will be similar to the Aegis At-Sea BMD capability inherent in the DDG-113 series of the Arleigh Burke Class Destroyers to facilitate training and logistical support by the lead service, Navy. Aegis Ashore essentially re-hosts the required BMD components of a Navy Destroyer in an ashore configuration to include a Deckhouse structure and weapon system comprised of a SPY radar, Vertical Launch System, computing infrastructure, Command, Control, Communications, Computers and Intelligence (C4I) systems, and operator consoles. It will provide sophisticated engagement strategies. Aegis Ashore can adapt to the threat and can be deployed/redeployed worldwide to areas needed to provide persistent coverage for the Geographic Combatant Commanders.

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>P-1 Line Item Nomenclature:</b> MD73 - Aegis Ashore Phase III
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**ID Code** (A=Service Ready, B=Not Service Ready) : A **Program Elements for Code B Items:** 0208866C **Other Related Program Elements:** 0208866C

**MDAP/MAIS Code(s):**

Item Schedule		ID CD	Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Aegis Ashore Poland, Equipment and Deckhouse	P5	A	-	-	-	-	-	-	-	-	131.400	1	131.400	-	-	-	131.400	1	131.400	
<b>Total Gross/Weapon System Cost</b>																				131.400

Item Schedule		ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Aegis Ashore Poland, Equipment and Deckhouse	P5	A	-	-	256.325	-	-	38.574	-	-	63.884	-	-	71.600	-	-	-	561.783	1	561.783
<b>Total Gross/Weapon System Cost</b>					256.325			38.574			63.884			71.600			-			561.783

\*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P18 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P10.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

**Justification:**  
 The Aegis Ashore to be installed in Poland contains a Deckhouse structure and weapon system comprised of a SPY radar, Vertical Launch System, computing infrastructure, C4I systems, and operator consoles with very diverse procurement lead times from multiple contracts. The funding profile addresses the multiple actions required to field the Aegis Ashore end item in Poland in 2018.

FY 2014 procure Long Lead Aegis Weapon System Components  
 FY 2015 procure remainder of the Aegis Ashore Weapon System Components, Vertical Launching System, C4I, and Aegis Ashore Deckhouse structure  
 FY 2016 Assemble the Aegis Ashore Deckhouse structure Continental United States (CONUS), install Aegis Ashore Weapon System Components, and conduct verification test of the configuration. Start site preparations in Poland  
 FY 2017 De-install Aegis Ashore Weapon System and disassemble the Aegis Ashore Deckhouse, pack and ship all components to Poland. Start site activation and assembly of Aegis Ashore Deckhouse in Poland  
 FY 2018 Install Aegis Ashore Weapon System and conduct final configuration test validation

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>										<b>Date:</b> April 2013		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency				<b>MDAP/MAIS Code:</b> 362		<b>P-1 Line Item Nomenclature:</b> MD73 - Aegis Ashore Phase III				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> Aegis Ashore Poland, Equipment and Deckhouse		

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	1	-	1	-	-	-	-	-	1
Gross/Weapon System Cost (\$ in Millions)	-	-	-	131.400	-	131.400	256.325	38.574	63.884	71.600	-	561.783
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	-	-	131.400	-	131.400	256.325	38.574	63.884	71.600	-	561.783
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	-	-	-	<b>131.400</b>	-	<b>131.400</b>	<b>256.325</b>	<b>38.574</b>	<b>63.884</b>	<b>71.600</b>	-	<b>561.783</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (Units in Millions)	-	-	-	131.400	-	131.400	-	-	-	-	-	561.783

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Cost Elements († indicates the presence of a P-5A)	ID CD	All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Flyaway Cost																			
Recurring Cost																			
Aegis Ashore Poland, Equipment and Deckhouse	A	0.000	0	0.000	-	-	-	-	-	-	131.400	1	131.400	-	-	-	131.400	1	131.400
<b>Total Recurring Cost</b>				0.000			-			-			131.400			-			131.400
<b>Total Flyaway Cost</b>				0.000			-			-			131.400			-			131.400
<b>Gross Weapon System Cost</b>				-			-			-			131.400			-			131.400

Cost Elements († indicates the presence of a P-5A)	ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Flyaway Cost																			
Recurring Cost																			
Aegis Ashore Poland, Equipment and Deckhouse	A	256.325	1	256.325	38.574	1	38.574	63.884	1	63.884	71.600	1	71.600	-	-	-	112.357	5	561.783
<b>Total Recurring Cost</b>				256.325			38.574			63.884			71.600			-			561.783
<b>Total Flyaway Cost</b>				256.325			38.574			63.884			71.600			-			561.783

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<b>Exhibit P-5, Cost Analysis:</b> PB 2014 Missile Defense Agency													<b>Date:</b> April 2013					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency						<b>MDAP/MAIS Code:</b> 362			<b>P-1 Line Item Nomenclature:</b> MD73 - Aegis Ashore Phase III				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> Aegis Ashore Poland, Equipment and Deckhouse					

Cost Elements († indicates the presence of a P-5A)	ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Gross Weapon System Cost				256.325			38.574			63.884			71.600			-			561.783

**P-5 Remarks:**  
N/A

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2014 Missile Defense Agency **Date:** April 2013

**Appropriation / Budget Activity / Budget Sub Activity:**  
0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency

**P-1 Line Item Nomenclature:**  
MD77 - Radar Spares

**ID Code** (A=Service Ready, B=Not Service Ready) : B **Program Elements for Code B Items:** 0603884C **Other Related Program Elements:** 0603884C

**MDAP/MAIS Code(s):**

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	10.177	-	-	-	-	-	-	-	-	10.177
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	-	10.177	-	-	-	-	-	-	-	-	10.177
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	-	-	<b>10.177</b>	-	-	-	-	-	-	-	-	<b>10.177</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	10.177	-	-	-	-	-	-	-	-	10.177
Flyaway Unit Cost (Units in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (Units in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Description:**

Procure initial spares for Army Navy/Transportable Radar Surveillance and Control (AN/TPY-2) BMDS radars.

Item Schedule		ID CD	Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Initial Spares	P18		-	-	0.000	-	-	-	-	-	10.177	-	-	-	-	-	-	-	-	-
<b>Total Gross/Weapon System Cost</b>					-			-			10.177			-			-			-

Item Schedule		ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Initial Spares	P18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.177
<b>Total Gross/Weapon System Cost</b>					-			-			-			-			-			10.177

\*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P18 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P10.

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<b>Exhibit P-40, Budget Item Justification Sheet:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency		<b>P-1 Line Item Nomenclature:</b> MD77 - Radar Spares
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B	<b>Program Elements for Code B Items:</b> 0603884C	<b>Other Related Program Elements:</b> 0603884C
<b>MDAP/MAIS Code(s):</b>		
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.		

**Justification:**  
FY 2013: Initial spares for one AN/TPY-2 BMDS radar.

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<b>Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification:</b> PB 2014 Missile Defense Agency										<b>Date:</b> April 2013		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency				<b>P-1 Line Item Nomenclature:</b> MD77 - Radar Spares						<b>Item Nomenclature (Name):</b> Initial Spares		

<b>P1 Line Number, End Item Line Item Number and Name, MDAP/MAIS</b>	<b>Prior Years (\$M)</b>	<b>FY 2012 (\$M)</b>	<b>FY 2013 (\$M)</b>	<b>FY 2014 Base (\$M)</b>	<b>FY 2014 OCO (\$M)</b>	<b>FY 2014 Total (\$M)</b>	<b>FY 2015 (\$M)</b>	<b>FY 2016 (\$M)</b>	<b>FY 2017 (\$M)</b>	<b>FY 2018 (\$M)</b>	<b>To Complete (\$M)</b>	<b>Total (\$M)</b>
<b>Initial</b>												
BA 01 - Major Equipment												
1 - Initial Spares	0.000	-	10.177	-	-	-	-	-	-	-	-	10.177
<i>Initial Subtotal</i>	<i>0.000</i>	<i>-</i>	<i>10.177</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>10.177</i>
<b>Total Cost (Initial + Replenishment)</b>	<b>0.000</b>	<b>-</b>	<b>10.177</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10.177</b>

**P-18 Remarks:**  
Procure initial spares for one AN/TPY-2 BMDS radar.

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**Exhibit P-40, Budget Item Justification Sheet: PB 2014 Missile Defense Agency** **Date:** April 2013

**Appropriation / Budget Activity / Budget Sub Activity:**  
0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency

**P-1 Line Item Nomenclature:**  
MD83 - Iron Dome

**ID Code** (A=Service Ready, B=Not Service Ready) : A **Program Elements for Code B Items:** **Other Related Program Elements:** 0603913C

**MDAP/MAIS Code(s):**

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	1	-	-	1	-	1	1	-	-	-	-	3
Gross/Weapon System Cost (\$ in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	600.149
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	600.149
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>203.868</b>	<b>-</b>	<b>-</b>	<b>220.309</b>	<b>-</b>	<b>220.309</b>	<b>175.972</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>600.149</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (Units in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (Units in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	200.050

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**Description:**

Provides funding to the Government of Israel to procure the Iron Dome defense system to counter short-range rocket threats.

Item Schedule		ID CD	Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Iron Dome	P5	A	203.868	1	203.868	-	-	-	-	-	-	220.309	1	220.309	-	-	-	220.309	1	220.309
<b>Total Gross/Weapon System Cost</b>					<b>203.868</b>			<b>-</b>			<b>-</b>			<b>220.309</b>			<b>-</b>			<b>220.309</b>

Item Schedule		ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total		
Item Nomenclature*	Exhibits		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Iron Dome	P5	A	175.972	1	175.972	-	-	-	-	-	-	-	-	-	-	-	-	200.050	3	600.149
<b>Total Gross/Weapon System Cost</b>					<b>175.972</b>			<b>-</b>			<b>-</b>			<b>-</b>			<b>-</b>			<b>600.149</b>

\*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P18 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P10.

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<b>Exhibit P-40, Budget Item Justification Sheet:</b> PB 2014 Missile Defense Agency		<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency		<b>P-1 Line Item Nomenclature:</b> MD83 - Iron Dome
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) : A	<b>Program Elements for Code B Items:</b>	<b>Other Related Program Elements:</b> 0603913C
<b>MDAP/MAIS Code(s):</b>		
Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.		

**Justification:**  
FY 2014: Procurement for batteries of the Iron Dome weapon system.  
  
FY 2015: Continued procurement of batteries of the Iron Dome weapon system.

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<b>Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency</b>										<b>Date:</b> April 2013		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency				<b>MDAP/MAIS Code:</b> 362		<b>P-1 Line Item Nomenclature:</b> MD83 - Iron Dome				<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> Iron Dome		

Resource Summary	Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	To Complete	Total
Procurement Quantity (Units in Each)	1	-	-	1	-	1	1	-	-	-	-	3
Gross/Weapon System Cost (\$ in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	600.149
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	600.149
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>203.868</b>	<b>-</b>	<b>-</b>	<b>220.309</b>	<b>-</b>	<b>220.309</b>	<b>175.972</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>600.149</b>

*(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)*

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (Units in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	200.050

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Cost Elements († indicates the presence of a P-5A)	ID CD	All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Hardware Cost																			
Non Recurring Cost																			
Iron Dome	A	203.868	1	203.868	-	-	-	-	-	-	220.309	1	220.309	-	-	-	220.309	1	220.309
Total Non Recurring Cost				203.868			-			-			220.309			-			220.309
Total Hardware Cost				203.868			-			-			220.309			-			220.309
<b>Gross Weapon System Cost</b>				<b>203.868</b>			<b>-</b>			<b>-</b>			<b>220.309</b>			<b>-</b>			<b>220.309</b>

Cost Elements († indicates the presence of a P-5A)	ID CD	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost		
		Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Quantity (Each)	Total Cost (\$ M)
Hardware Cost																			
Non Recurring Cost																			
Iron Dome	A	175.972	1	175.972	-	-	-	-	-	-	-	-	-	-	-	-	200.050	3	600.149
Total Non Recurring Cost				175.972			-			-			-			-			600.149
Total Hardware Cost				175.972			-			-			-			-			600.149
<b>Gross Weapon System Cost</b>				<b>175.972</b>			<b>-</b>			<b>-</b>			<b>-</b>			<b>-</b>			<b>600.149</b>

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<b>Exhibit P-5, Cost Analysis:</b> PB 2014 Missile Defense Agency			<b>Date:</b> April 2013
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency	<b>MDAP/MAIS Code:</b> 362	<b>P-1 Line Item Nomenclature:</b> MD83 - Iron Dome	<b>Item Nomenclature (Item Number - Item Name, DODIC):</b> Iron Dome

**P-5 Remarks:**  
N/A