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



Defense-Wide FY 2014 President's Budget Exhibit P-1 FY 2014 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0300D Procurement, Defense-Wide

Line	Ident		2012 e & OCO)	Base	2013 Request CR Adj*	FY 20 OCO Rec with CF	quest	Emerge Disas Relief A 201	ster Act of	Total	2013 Request CR Adj*	S e
No Item Nomenclature	Code	Quantit	y Cost	Quantity	y Cost	Quantity	Cost	Quantity 	Cost	Quantity	y Cost	C C
Budget Activity 01: Major Equipment												
Major Equipment, Missile Defense Agency	7											
25 THAAD	В	44	604,650	36	460,728					36	460,728	U
26 Aegis BMD	В	28	378,393	29	389,626					29	389,626	U
27 BMDS AN/TPY-2 Radars	В	2	380,195	1	217,244					1	217,244	U
28 Aegis Ashore Phase III	A											U
29 Radar Spares	В				10,177						10,177	U
30 Iron Dome	А											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	•

22 Mar 2013

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.

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

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

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

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

Appropriation 0300D: Procurement, Defense-Wide

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
25	01	17	MD07	THAADVolum	ie 2b - 1
26	01	17	MD09	AEGIS BMDVolume	2b - 11
27	01	17	MD11	BMDS AN/TPY-2 RadarsVolume	2b - 21
28	01	17	MD73	Aegis Ashore Phase IIIVolume	2b - 41
29	01	17	MD77	Radar SparesVolume	2b - 45
30	01	17	MD83	Iron DomeVolume	2b - 49



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

Line Item Title	Line Item Number	Line #	ВА	BSA Page
AEGIS BMD	MD09	26	01	17Volume 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	17Volume 2b - 49
Radar Spares	MD77	29	01	17Volume 2b - 45
THAAD	MD07	25	01	17 Volume 2b - 1



Fiscal Year 2014 Budget Estimates Missile Defense Agency (MDA)



March 2013

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OP-32 Exhibit - Appropriation Summary of Price/Program Growth
OP-32A Exhibit - Appropriation Summary of Price/Program Growth
PB-31R Exhibit - Personnel Summary
PB-31D Exhibit - Summary of Funding Increases and Decreases
OP-5 Exhibit - Operation and Maintenance Detail
Contract Services

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

	FY 2012 <u>Actual</u>	FY 2013 Estimate	FY 2014 Estimate
1. Operational Support	201,733	259,975	256,201
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
Total Operation and Maintenance, Defense-Wide	201,733	259,975	256,201

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

	DWCF Purchases	FY 2012 Program	Price Growth Percent	Price <u>Growth</u>	Program <u>Growth</u>	FY 2013 Program	Price Growth <u>Percent</u>	Price <u>Growth</u>	Program <u>Growth</u>	FY 2014 Program
679	Cost Reimbursable Purchase	2,205	2.00%	44	1,997	4,246	1.90%	81	-1,945	2,382
699	Total DWCF Purchases	2,205		44	1,997	4,246		81	-1,945	2,382
	Other Purchases									
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
999	Total Other Purchases	199,528		4,182	52,019	255,729		4,859	-6,769	253,819
	Total	201,733		4,226	54,016	259,975		4,940	-8,714	256,201

	DWCF Purchases	FY 2012 Program	Price Growth Percent	Price <u>Growth</u>	Program Growth	FY 2013 Program	Price Growth Percent	Price Growth	Program Growth	FY 2014 Program
679	Cost Reimbursable Purchase	2,205	2.00%	44	1,997	4,246	1.90%	81	-1,945	2,382
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999	Total Other Purchases	199,528		4,182	52,019	255,729		4,859	-6,769	253,819
	Total	201,733		4,226	54,016	259,975		4,940	-8,714	256,201

	FY 2012	FY 2013	FY 2014	Change FY 2013/2014
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.

FY	2013 President's Budget Request (Amended, if applicable)	TOTAL 259,975
1.	Congressional Adjustments	
	a. Distributed Adjustments	
	b. Undistributed Adjustments	
	c. Adjustments to Meet Congressional Intent	
	d. General Provisions	
FY	2013 Appropriated Amount	259,975
2.	War-Related and Disaster Supplemental Appropriations	
3.	Fact-of-Life Changes	
FY	2013 Baseline Funding	259,975
4.	Reprogrammings (Requiring 1415 Actions)	
Rev	vised FY 2013 Estimate	259,975
	Less: Item 2, War-Related and Disaster Supplemental propriations and Item 4, Reprogrammings 2013 Normalized Current Estimate	259,975
	Price Change	4,940
	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

PB-31D Exhibit, Summary of Funding Increases and Decreases $$\operatorname{\mathtt{MDA}}-7$$

<pre>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)</pre> 9. Program Decreases	TOTAL 6,078
a. Annualization of FY 2013 Program Decreases	
b. One-Time FY 2013 Increases	
c. Program Decreases in FY 2014	
1) BMDS Radar program decrease is due to the Army assuming responsibility for site support operations & sustainment cost in the AN/TPY-2 Forward Based Mode (FY 2013 baseline \$192,133K, +0 FTE)	-50,140
FY 2014 Budget Request	256,201

	FY 2012	Price	Program	FY 2013	Price	Program	FY 2014
	Actual	Change	Change	<u>Estimate</u>	Change	Change	Estimate
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

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.

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

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.

III. Financial Summary (\$ in thousands)

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

III. Financial Summary (\$ in thousands)

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

III. Financial Summary (\$ in thousands)

 C. Reconciliation of Increases and Decreases FY 2013 President's Budget Request (Amended, if applicable) 1. Congressional Adjustments a. Distributed Adjustments b. Undistributed Adjustments c. Adjustments to Meet Congressional Intent 	Amount	Totals 259,975
d. General Provisions		
FY 2013 Appropriated Amount		259 , 975
2. War-Related and Disaster Supplemental Appropriations		
3. Fact-of-Life Changes		
FY 2013 Baseline Funding		259 , 975
4. Reprogrammings (Requiring 1415 Actions)		
Revised FY 2013 Estimate		259 , 975
5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings		
FY 2013 Normalized Current Estimate		259,975
6. Price Change		4,940
7. Functional Transfers		1,310
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

MDA-15

III. Financial Summary (\$ in thousands)

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

IV. Performance Criteria and Evaluation Summary:

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

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

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

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

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

 A_{\circ} = Total Time - Non Mission Capable Time

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_{\circ} downtime. For AN/TPY-2 radars, performance incentives are calculated as follows:

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

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

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

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

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

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

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

CONTRACT SERVICES FUNDING Defense-Wide Missile Defense Agency Operation and Maintenance (\$ in Millions)

		FY 2012	FY 2013	FY 2013	FY 2014	FY 2014
		Base & OCO	Base	OCO	Base	oco
Line	By PB/OP-32 Inflation Category Code	Actual /1	Request /2	Request /2	Request	Request
931	Contract Consultants					
932	Mgmt and Professional Support Services					
933	Studies, Analysis and Evaluations					
934	Engineering and Technical Services					
	Total 25.1 - Advisory and Assistance Services	0	0	0	0	0
989	Other Contracts					
926	Other Overseas Purchases					
	Total 25.2 - Other Services	0	0	0	0	0
923	Facility Maintenance					
	Total 25.4 - Operation and Maintenance of Facilities	0	0	0	0	0
985	Research and Development Contracts					
	Total 25.5 - Research and Development Contracts	0	0	0	0	0
986	Medical Care					
	Total 25.6 - Medical Care	0	0	0	0	0
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					
	Total 25.7 - Operation and Maintenance of Equipme	ent 188	231	0	216	0
964	Subsistence Contracts					
	Total 25.8- Subsistance and Support of Persons	0	0	0	0	0
	Total	188	231	0	216	0

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

Numbers may not add due to rounding

¹ FY 2012 includes Overseas Contingency Operations (OCO) funding.

² Reflects the FY 2014 President's Budget request.

CONTRACT SERVICES - MANPOWER

Defense-Wide Missile Defense Agency Operation and Maintenance Contractor Full-Time Equivalents

Line 931 932 933	By PB/OP-32 Inflation Category Code Contract Consultants Mgmt and Professional Support Services Studies, Analysis and Evaluations	FY 2012 Base & OCO <u>Actual</u> ^{/1}	FY 2013 Base Request	FY 2013 OCO Request	FY 2014 Base Request	FY 2014 OCO Request
934	Engineering and Technical Services Total 25.1 - Advisory and Assistance Services	0	0	0	0	0
989 926	Other Contracts Other Overseas Purchases Total 25.2 - Other Services	0	0	0	0	0
923	Facility Maintenance Total 25.4 - Operation and Maintenance of Facilities	0	0	0	0	0
985	Research and Development Contracts Total 25.5 - Research and Development Contracts	0	0	0	0	0
986	Medical Care Total 25.6 - Medical Care	0	0	0	0	0
922 927 928 929 930 990	Equipment Maintenance - Contract Air Defense Contracts Ship Maintenance by Contract Aircraft Rework by Contract Other Depot Maintenance (Non-Fund) IT Contract Support Services					
	Total 25.7 - Operation and Maintenance of Equipme	nt 110	605	0	110	0
964	Subsistence Contracts Total 25.8- Subsistance and Support of Persons	0	0	0	0	0
	Total Program Resources Collection Process as of XX XXXXX, 2011	110	605	0 Numbers	110 may not add due	0 to rounding

¹ FY 2011 includes Overseas Contingency Operations (OCO) funding.

FY 2014 - FY 2018 Integrated Program/Budget Submission Guidance

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 ninetynine 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

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

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)

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

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

(\$ in Thousands)

State/Country/Installation/Project	Auth <u>Request</u>	Approp Request	New/Current <u>Mission</u>
Major Construction			
Alaska 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
Worldwide Classifed			
AN/TPY-2 Radar Site	15,000	15,000	New
Romania Deveselu Base Aegis Ashore Missile Defense System Complex, Increment 2	-	85,000	New
Unspecified Minor Construction	2,000	2,000	
MILCON Planning and Design	10,891	10,891	
TOTAL MILITARY CONSTRUCTION	127,095	212,095	

1. COMPONENT	2. DATE									
MDA	F'	FY 2014 MILITARY CONSTRUCTION PROJECT DATA Mar 2013								2013
3. INSTALLATION AND LO	CATION				4. COMMAN	ID			-	CONSTR.
Clear Air Force	Station	ı, Alasi	ka		Missile	cost INDEX issile Defense Agency 2.01				
6. PERSONNEL	F	PERMANEN'	Т		STUDENTS	3	,	SUPPORTE	D	
STRENGTH:	OFFICER	ENLISTED	CIVILIAN	OFFICE	R ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
N/A: Tenant of U.S. Air Force										
	7. INVENTORY DATA (\$000)									
A. TOTAL ACERAGE							N/A	A		
B. INVENTORY TOTAL AS	OF						N/A	A		
C. AUTHORIZATION NOT	YET IN INVEN	NTORY					0			
D. AUTHORIZATION REQI	JESTED IN TI	HE FY2014					17,2	204		
E. AUTHORIZATION REQU	JESTED IN TH	HE FY2015					0			
F. PLANNED IN NEXT THE	REE PROGRA	M YEARS					0			
G. REMAINING DEFICIENCY										
H. GRAND TOTAL. 17,204										
8. PROJECTS REQUESTE	D IN THE FY	2014 PROGI	RAM:							
1311	PROJECT TIT BMDS Upo Warning	grade Ea	arly		OPE 400 SF	(\$0	/	DESIGN START Mar 12	STATUS COMPLETE Dec 13	:
9. FUTURE PROJECTS:										
CATEGORY CODE	PROJECT TIT	LE		SC	OPE		0ST 000)			
10. MISSION OR MAJOR I field an integrat States, our deplomissiles in all p	ed, laye yed forc	red Bal es, all	listic N ies, and	Missil	e Defense	e System	(BMDS)	to def	end the	United
11. OUTSTANDING POLL	JTION AND S	AFETY DEF	ICIENCIES:							
A. Air Poll	ution:				N	/A				
B. Water po			_		·	/A				
C. Occupati	onal safe	etv and	health	(OSH):	N	/A				

1. COMPONENT MDA

FY 2014 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Mar 2013

3. INSTALLATION AND LOCATION6

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

9. COST ESTIMATES

	9. CO31 E311	5. COST ESTIMATES									
ITEM	U/M (M/E)	QUANTITY	UNIT COST	COST (\$000)							
PRIMARY FACILITIES				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)							
SUPPORTING FACILITIES				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%)				<u>769</u>							
TOTAL CONTRACT COST				$16, \overline{154}$							
SIOH (6.5%)				<u>1,050</u>							
TOTAL REQUEST				17,204							
TOTAL REQUEST ROUNDED				17,204							
INSTALLED EQUIPMENT-OTHER APPROP				(150,700)							

10. DESCRIPTION OF PROPOSED CONSTRUCTION: 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.

11. REQUIREMENT: 7,400 SF ADEQUATE: - SUBSTANDARD: -7,400 SF

PROJECT: 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.

MDA

FY 2014 MILITARY CONSTRUCTION PROJECT DATA

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

11. REQUIRED (cont):

IMPACT IF NOT PROVIDED: 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.

ADDITIONAL INFORMATION: 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 sensored perimeter fence and construct two fuel tanks to support the power

12. SUPPLEMENTAL DATA:

- A. Estimated Design Data
 - (1) Status

(a)	Date Design	Started:				Mar	2012
(b)	Percent comp	plete 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:
- (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
- Feb 2014 (5) Construction Start
- Mar 2016 (6) Construction Complete

1. COMPONENT
MDA
FY 2014 MILITARY CONSTRUCTION PROJECT DATA
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

12. SUPPLEMENTAL DATA: (cont)

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

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

1. CO	MPONENT									2. DATE	
	MDA	F	FY 2014 MILITARY CONSTRUCTION PROJECT DATA Ma								2013
3. INSTALLATION AND LOCATION						4. COMMAN	D				
Ft.	Greely, Ala	ska				Missile	Defens	se Agen	су		INDEX 02
6. PER	SONNEL	F	PERMANEN [*]	Т		STUDENTS	<u> </u>		SUPPORTE)	
	STRENGTH:	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL
N/A:	Tenant of U.S. Army										
				7 1517	ENTORY	ATA (\$000)			1		
				7. INV	ENTORYL	ATA (\$000)					
	TAL ACERAGE	205						N/A			
	/ENTORY TOTAL AS	-						N/A	A		
	THORIZATION NOT						•••••	0	200		
	THORIZATION REQ							82,0	000		
	THORIZATION REQ							0			
F. PLANNED IN NEXT THREE PROGRAM YEARS 0											
_	G. REMAINING DEFICIENCY										
								02,0			
	OJECTS REQUEST I CATEGORY	ED IN THE FY2	2014 PROGE	RAM:			CC	ST	DESIGN :	SILTATE	
	CODE	PROJECT TIT			SC	OPE	(\$000) START COM				
	8910	Mechanica Building			1 10	,400 SF	82,	000	Apr 13	Jul 14	
9. FU	TURE PROJECTS:										
С	ATEGORY CODE	PROJECT TIT	LE		SCO	OPE		9ST 900)			
10. MISSION OR MAJOR FUNCTIONS: 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.											
11. 0	UTSTANDING POLL		AFETY DEF	ICIENCIES:							
	A. Air Poll					,	/A				
	-	llution:	.+ ^~~	h o o 1 + h	(OCII) -	,	/A /A				
	C. Occupati	onal safe	ery and	nealth	(OSH):	N,	/ A				

1. COMPONENT MDA FY 2014 MILITARY CONSTRUCTION PROJECT DATA 2. DATE Mar 2013

3. INSTALLATION AND LOCATION 4. PROJECT TITLE

Fort Greely, Alaska Mechanical-Electrical Building, Missile Field #1

8. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST (\$000)
0603882C	8910	MDA 649	82,000

9. COST ESTIMATES								
ITEM	U/M		QUANTITY	UNIT C	OST	COST \$(000)		
PRIMARY FACILITIES						56 , 029		
Mechanical-Electrical Building (MEB)	m2 (SF)	966	(10,400)	10,178	(945)	(9 , 832)		
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)		
SUPPORTING FACILITIES						14,312		
Site HEMP Electrical	LS					(3,523)		
Water, Sewer, Gas	LS					(1,000)		
Paving, Walks	LS					(1,501)		
Site Imp / Demo	LS					(7,038)		
Information/Communication Systems	LS					(1,250)		
SUBTOTAL						70,341		
CONTINGENCY (5.00%)						3,517		
TOTAL CONTRACT COST						73 , 858		
DESIGN/BUILD DESIGN COST (4.00%)						2,954		
SIOH (6.50%)						4,801		
TOTAL REQUEST						81,613		
TOTAL ROUNDED REQUEST						82,000		
INSTALLED EQUIPMENT-OTHER APPROP						2,500		

10. DESCRIPTION OF PROPOSED CONSTRUCTION: 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.

MEB Blast Protection consists of 20-inch thick reinforced concrete walls and ceiling, blast rated doors and valves, and foundation substructure anchoring.

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.

The MEB foundations include special features to meet site specific ground motion requirements, seismic requirements, and blast protection requirements.

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

MDA

FY 2014 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Mar 2013

3. INSTALLATION AND LOCATION

Fort Greely, Alaska

4. PROJECT TITLE

5. PROJECT NUMBER

Mechanical-Electrical Building, Missile Field #1

MDA 649

10. DESCRIPTION OF PROPOSED CONSTRUCTION (CONTINUED):

power system, and electronic controls to monitor building systems and the base infrastructure.

The MEB will contain an underground utility vault entrance and utilidor extension that will connect to the existing Missile Field 1 utilidor. Utility branch lines to the silos and silo interface vaults will be restored to meet current mission requirements.

Security measures include intrusion detection, access control, and construction escorts.

Supporting facilities include: HEMP protected electrical distribution, water, sewer, paving, fire protection and alarm systems, site improvements, information management systems, and demolition.

11. REQUIRED: 10,400 SF

ADEQUATE: NONE

SUBSTANDARD: NO

NONE

PROJECT: Construct HEMP and blast protected Mechanical-Electrical Building (MEB),
associated security infrastructure, and supporting facilities. (New Mission)

REQUIREMENT: This project is required to provide the Ground Based Mid-course Defense System with increased capabilities to enhance homeland defense. This project constructs a HEMP and blast protected MEB that supports current survivability and reliability, availability, and maintainability (RAM) requirements, and upgrades the security and lighting infrastructure to meet System Security Level-A (SSL-A) requirements. Redundant HEMP protected utility feeds are required for mission critical equipment. The new MEB will allow the upgraded Missile Field 1 to increase the potential number of operational interceptor silos at Fort Greely, AK.

CURRENT SITUATION: The existing MEB at Missile Field 1 was built as a test bed and provided limited defense capability. The existing missile field and utility infrastructure is not HEMP protected and does not have the redundancy that is required of an operational weapon system. The lack of a HEMP protected facility and redundant HEMP protected utilities could compromise the mission readiness and capability of the Ground Based Mid-course System if Missile Field 1 were to be reutilized to perform missile defense operations.

IMPACT IF NOT PROVIDED: Planned enhancements and capabilities of the Ballistic Missile Defense System will not be available for our Nation's homeland defense.

ADDITIONAL INFORMATION: This project is being coordinated with the appropriate physical security plans and includes required physical security and/or combating terrorism measures. All required NEPA and/or EO 12114 analyses will be completed prior to the start of construction.

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

A companion infrastructure repair project, funded with RDT&E, is being programmed for other Missile Field 1 components to meet current missile field standards.

1. COMPONENT MDA	FY 2014 MILITARY CONSTRUCTION PROJECT D	2. DATE Mar 201
3.INSTALLATION A		
4. PROJECT TITLE Mechanical-	Electrical Building, Missile Field #1	5. PROJECT NUMBER MDA 649
12. SUPPLEMENTA	AL DATA:	
	mated Design Data Status:	
(1)	(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) E	Basis:	
	(a) Standard or Repetitive Design	Yes*
	(b) Where Design Was Most Recently Used	Alaska
(3)	otal 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:

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

DD FORM 1391

1. COMPONENT										2. DATE		
MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA								Mar	2013		
3. INSTALLATION AND LOC	ATION				4. CC	MMAN	D			5. AREA CONSTR.		
Worldwide Classi	fied				Mis	sile	Defens	se Agen	су	COST IND 1.40		
6. PERSONNEL	F	PERMANEN'	Т		STU	DENTS			SUPPORTE	D		
STRENGTH:	OFFICER	ENLISTED	CIVILIAN	OFFICE	R ENL	ISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL	
N/A: Tenant of U.S. Army												
			7. INVI	ENTORY	DATA (\$000)						
A TOTAL ACEDACE								ът / 7	`			
A. TOTAL ACERAGE	N E							N/A				
B. INVENTORY TOTAL AS C							•••••	N/A	4			
C. AUTHORIZATION NOT Y		_					•••••	0				
D. AUTHORIZATION REQUE							•••••	15,	000			
E. AUTHORIZATION REQUE								0				
F. PLANNED IN NEXT THRE		GRAM YEARS 0										
G. REMAINING DEFICIENC	Y							0				
H. GRAND TOTAL.								15,0	000			
	OIN THE FY2 ROJECT TIT N/TPY-2	LE			COPE EA		(\$0	/	DESIGN START Mar 13	STATUS COMPLETE Jan 14	≣	
9. FUTURE PROJECTS:												
CATEGORY CODE PI	ROJECT TIT	LE		SC	COPE		CO (\$0	(ST)				
10. MISSION OR MAJOR FUNCTIONS: 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.												
11. OUTSTANDING POLLUT		AFETY DEF	ICIENCIES:									
A. Air Pollu							/A					
B. Water pol		,	17:1	(0000)			/A					
C. Occupatio	na⊥ saf∈	ety and	nealth	(OSH):	:	N,	/A					

1. COMPONENT MDA

FY 2014 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Mar 2013

5. INSTALLATION AND LOCATION6
Worldwide Classified

6. PROJECT TITLE
AN/TPY-2 Radar Site

5. PROGRAM ELEMENT 0603884C

6. CATEGORY CODE 3121

7. PROJECT NUMBER
MDA 648

8. PROJECT COST (\$000) 15,000

9. COST ESTIMATES

9. COST ESTIMATES									
ITEM	U/M (M/E)	QUANTITY	UNIT COST	COST (\$000)					
PRIMARY FACILITIES				8,549					
Modular Facilities	EA	4	69 , 500	(278)					
Clearing and Grubbing	AC	3.2	111,665	(357)					
Concrete Slab - Radar area	SY	544	583.88	(318)					
Security Fencing and Lighting	LF	9270	207.56	(1,924)					
Security Facilities & Infrastructure	LS			(4,976)					
Fuel System and Storage	LS			(696)					
SUPPORTING FACILITIES				4,161					
Site Electrical	LS			(830)					
Water, Sewer, Gas	LS			(1,236)					
Site Improvement/Earthwork	LS			(900)					
Information/Communication Systems	LS			(600)					
Other (Mob/Demob)	LS			(595)					
SUBTOTAL				12,710					
CONTINGENCY (10%)				1,271					
TOTAL CONTRACT COST				13,981					
SIOH (6.5%)				909					
TOTAL REQUEST				14,890					
TOTAL REQUEST ROUNDED				15,000					
INSTALLED EQUIPMENT-OTHER APPROP				(189,490)					

10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct a site to support the Army/Navy Transportable Radar Surveillance (AN/TPY-2) radar and equipment, to include concrete and gravel hardstands, operations facility, maintenance facility, storage facility, entry control point, security control center, Electronic Security System infrastructure, security lighting, security fencing, security barriers, fuel storage system, and lightning protection and grounding system. Supporting facilities include power distribution system, communications network, asphalt pavement, gravel pavement, sanitary sewers, water distribution lines, and site improvements. Life support facilities and additional Antiterrorism/Force Protection measures will be provided by the U.S. Army.

11. REQUIREMENT: 1 EA ADEQUATE: None SUBSTANDARD: None PROJECT: Prepare a new PACOM site to host the AN/TPY-2 radar components, support facilities, and infrastructure. (New Mission)

REQUIREMENT: The AN/TPY-2 radar requires a prepared site, support facilities, and infrastructure to provide more robust regional defensive and homeland defensive capabilities against short/medium/intermediate-range ballistic missile threats. The radar is an element of the Ballistic Missile Defense System (BMDS) and provides a forward sensor for early detection, tracking and discrimination of threats. The radar transmits the track data to the BMDS Command and Control, Battle Management and Communications (C2BMC) within a layered sensor network to accurately locate, discriminate, and track threats.

<u>CURRENT SITUATION:</u> There are currently no adequate sites in the PACOM area of responsibility able to receive the radar and supporting equipment, and meet the performance requirements. Deployment and operation of the radar is not possible without preparation of the site.

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

11. REQUIRED (cont):

IMPACT IF NOT PROVIDED: If this project is not provided, the radar cannot be deployed, limiting the capability of the BMDS to defend against regional threats. Deployment & operation of the radar is not possible without preparing this site.

<u>ADDITIONAL INFORMATION:</u> Analogous cost estimates were derived by analyzing costs for similar designed facilities that have been constructed at other locations.

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.

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.

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.

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 will be RDT&E funded.

12. SUPPLEMENTAL DATA:

- A. Estimated Design Data
 - (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-E	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

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

TOTAL RDT&E 189,490

MDA 648

12. SUPPLEMENTAL DATA: (cont)

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

		FY	
Equipment	Procuring	Appropriated	Cost
Nomenclature	<u>Appropriation</u>	or Requested	\$(000)
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	2,420
		SUB-TOTAL	188,740
Extension of Commercial Power	RDT&E	FY15	750
		SUB-TOTAL	750

1. COMPONENT									2. DATE		
MDA	F'	Y 2014 M	IILITARY	CONST	RUCTIO	N PROJE	CT DAT	Α	Mar	2013	
3. INSTALLATION AND LOC	CATION				4. COMMAN	D		5. AREA CONSTR. COST INDEX			
Deveselu Base, F	Romania			1	Missile	Defens	se Agen	су		99	
6. PERSONNEL	F	PERMANEN	Т		STUDENTS		Ç	SUPPORTE	TED		
STRENGTH:	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	TOTAL	
N/A: Tenant of U.S. Navy											
			7. INVI	ENTORY D	ATA (\$000)						
A. TOTAL ACERAGE							N/A	A			
B. INVENTORY TOTAL AS	OF						N/A	A			
C. AUTHORIZATION NOT Y	ET IN INVEN	NTORY					0				
D. AUTHORIZATION REQU	ESTED IN TI	HE FY2014					0				
E. AUTHORIZATION REQU	ESTED IN TH	HE FY2015					0				
F. PLANNED IN NEXT THR	EE PROGRA	M YEARS					0				
G. REMAINING DEFICIENC	Υ		0								
H. GRAND TOTAL.							0				
1456	ROJECT TIT legis Ash Defense S Increment	nore Mis System C		SCO 1 E		(\$0	/	DESIGN START Sep 11	STATUS COMPLETE Jan 13	≣	
9. FUTURE PROJECTS: CATEGORY CODE F	ROJECT TIT	LE		SCO	PE	CO (\$0	ST 00)				
10. MISSION OR MAJOR FUNCTIONS: 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. 11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:											
A. Air Pollu	ition:				N,	/A					
B. Water pol	lution:				N	/A					
C. Occupation	nal safe	etv and	health	(OSH):	N	/A					

MDA

FY 2014 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Mar 2013

3. INSTALLATION AND LOCATION Deveselu Base, Romania

0603892C

4. PROJECT TITLE

Aegis Ashore Missile Defense System Complex, Increment 2

8. PROGRAM ELEMENT

1456

6. CATEGORY CODE

7. PROJECT NUMBER MDA 646 8. PROJECT COST (\$000)

85,000

9.	CO	ST	ES	HIN	1AI	ES

9. COST ESTIMATES								
ITEM	ITEM U/M (M/E) QUANTITY UNIT COST					COST \$(000)		
PRIMARY FACILITIES							150,830	
Launch Area Infrastructure		EΑ		3	179	9,800	(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)	
SUPPORTING FACILITIES							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 securi

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

5. PROJECT NUMBER

MDA 646

10. DESCRIPTION OF PROPOSED CONSTRUCTION (cont): system infrastructure; perimeter security fencing, gates and patrol road within the restricted area boundary.

Supporting facilities include: electrical services; water; sewer; paving; Walkways; storm drainage; fire protection and alarm systems; site improvements; telecommunication and information management systems. The project also includes a sewage lift station; water supply wells; water treatment plant; and a 30,000 gallon potable water storage tank. Access for handicapped will be provided. Temporary facilities will support construction oversight and equipment installation.

The launcher pads, radar deckhouse, and deckhouse support building foundations include special features to meet technical stability requirements and fill material to provide positive drainage away from facilities.

Special construction includes lightning protection, equipment grounding systems, and Electromagnetic Interference shielding and testing in mission support areas. The radar deckhouse and support building will receive Nuclear/Biological/Chemical protection.

Installed equipment includes raised flooring, redundant mechanical and electrical systems, uninterruptable power system and electronic controls to monitor building systems and the base infrastructure.

Temporarary facilities, mobilization/demobilization includes provisions for a construction man-camp based upon the remote rural location of Deveselu and the non-availability of skilled workers necessary to construct a highly technical missile defense site.

11. REQUIRED: 1 EA ADEQUATE: NONE SUBSTANDARD: NONE PROJECT: Construct a new Aegis Ashore Missile Defense System Complex in Romania. (New Mission)

REQUIREMENT: This project is required to enhance a more robust regional ballistic missile defense through the European Phased Adaptive Approach Phase II against short/medium-range ballistic missile threats to European Allies and deployed troops.

CURRENT SITUATION: There is currently no land-based ballistic missile defense configuration in Europe. In keeping with the 17 September 2009 announcement by the President of the United States, this project is necessary to meet the European Phased Adaptive Approach Phase II deployment of a land-based Aegis ballistic missile defense system configuration in southern Europe by 2015.

IMPACT IF NOT PROVIDED: If this project is not provided, the Aegis Ashore capability will not be able to be deployed. If the Aegis Ashore Missile Defense System site is not developed, the Phased Adaptive Approach Phase II timeline to deploy a land-based Aegis ballistic missile defense capability in Europe, as announced by the President of the United States, will not be met.

ADDITIONAL INFORMATION: The Navy is programming a concurrent companion project (FY13 Navy Worldwide P400, Aegis Ashore Missile Defense Complex) that will provide Base Operations Support for this Aegis Ashore Missile Defense System site. Navy funded project will include living, dining, and recreation space for site personnel as well as site security, administration, medical treatment, base maintenance and warehouse space.

Extension of upgraded commercial power to the site will be acquired during site activation, funded with other appropriations, and provided in accordance with applicable Defense Federal Acquisition Regulations (DFARs) for utility service contracts. Volume 2b - Iviii

1. COMPONENT MDA

FY 2014 MILITARY CONSTRUCTION PROJECT DATA

2. DATE

Mar 2013

3. INSTALLATION AND LOCATION

Deveselu Base, Romania

4. PROJECT TITLE

5. PROJECT NUMBER

Aegis Ashore Missile Defense System Complex, Increment 2

MDA 646

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.

12. SUPPLEMENTAL DATA:

- A. Estimated Design Data
 - (1) Status:

(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
Basi	s:	
(a)	Standard or Repetitive Design	Yes
(h)	Where Design Was Most Perently Head	DMDE UT

	==	_
(2)	Basis:	
	(a) Standard or Repetitive Design	Yes
	(b) Where Design Was Most Recently Used	PMRF, HI
(3)	Total Design Cost $(c) = (a) + (b)$ or $(d) + (e)$	(\$000)
	(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
(4)	Contract Award	May 2013
(5)	Construction Start	Jun 2013
(6)	Construction Completion	Apr 2015

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1. COMPONENT		2. DATE
MDA	FY 2014 MILITARY CONSTRUCTION PROJECT DATA	Mar 2013

3. INSTALLATION AND LOCATION

Deveselu Base, Romania

4. PROJECT TITLE

Aegis Ashore Missile Defense System Complex, Increment 2

MDA 646

12. SUPPLEMENTAL DATA (cont):

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

		FY	
Equipment	Procuring	Appropriated	Cost
Nomenclature	Appropriation	or Requested	\$(000)
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

3. INSTALLATION AND LOCATION Various Worldwide Locations 6. CATEGORY CODE N/A 9. COST ESTIMATES ITEM 4. PROJECT TITLE Unspecified Minor Construction 7. PROJECT NUMBER N/A 8. PROJECT COST (\$000) 2,000 UNIT COST COST (\$000) COST		2.DATE Mar 2013					
						Constructi	on
			7. PI	ROJECT		8. PROJECT	
TY 2014 MILITARY CONSTRUCTION PROJECT D 3. INSTALLATION AND LOCATION Various Worldwide Locations 4. PROJECT TITLE Unspecified Minor 5. PROGRAM ELEMENT N/A 6. CATEGORY CODE N/A 9. COST ESTIMATES ITEM U/M QUANTITY							
	ı	TEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Unspecified Mi	nor Co	nstruction		LS			2,000
ESTMATED CONTR	ACT CO	ST					2,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION: 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.

11. REQUIREMENT: As required

CONTINGENCY PERCENT (0.0%)

TOTAL REQUEST (ROUNDED)

SUPERVISION, INSPECTION & OVERHEAD (0.0%)

INSTALLED EQPT-OTHER APPROPRIATIONS

SUBTOTAL

TOTAL REQUEST

REQUIREMENT: 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.

2,000

2,000

2,000

(0)

1. COMPONENT MDA	FY 2014 MILITARY	CONSTRU	JCTION	ATA	2. DATE Mar 2013	
3. INSTALLATION AND LO Various Worldwi			ROJECT annin	TITLE g and Desig	n	
5. PROGRAM ELEMENT N/A	6. CATEGORY CODE	7. P	ROJECT	NUMBER N/A	8. PROJECT	COST (\$000) 10,891
		9. COST EST	IMATES		- 1	
	ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Planning and De	sign		LS			10,891

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

ESTMATED CONTRACT COST

TOTAL REQUEST (ROUNDED)

SUBTOTAL

TOTAL REQUEST

CONTINGENCY PERCENT (0.0%)

SUPERVISION, INSPECTION & OVERHEAD (0.0%)

INSTALLED EQPT-OTHER APPROPRIATIONS

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.

10,891

10,891

10,891

10,891

(0)

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

MD07 - THAAD

P-1 Line Item Nomenclature:

ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0603881C, 0603884C

Other Related Program Elements: 0603881C, 0603884C

MDAP/MAIS Code(s):

	Prior			FY 2014	FY 2014	FY 2014					То	
Resource Summary	Years	FY 2012	FY 2013 [#]	Base	OCO##	Total	FY 2015	FY 2016	FY 2017	FY 2018	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ 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
	(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	he corresponding	budget request	s are documente	ed elsewhere.)			

	(The following R	Resource Sum	mary rows are to	r intormational p	urposes only. Ti	ne corresponding	g budget request	s are documented	l 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

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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 Sch	edule		Р	rior Year	's		FY 2012			FY 2013		FY	2014 Ba	ise	FY	2014 O	co	FY	2014 To	tal
Item Nomenclature* Exhibits		ID CD	Unit Cost	Qty (Each)	Total Cost				Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
THAAD	P5, P5A, P21	В	23.069	48	1,107.323	-	44	604.650	-	36	460.728	16.139	36	581.005	-	-	-	16.139	36	581.005
Total Gross/Weapon System Cost					1,107.323			604.650			460.728			581.005			-			581.005

UNCLASSIFIED Page 1 of 10

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^{##} The FY 2014 OCO Request will be submitted at a later date

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

MD07 - THAAD

P-1 Line Item Nomenclature:

Equipment, Missile Defense Agency ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0603881C, 0603884C

Other Related Program Elements: 0603881C, 0603884C

MDAP/MAIS Code(s):

Item Sche	dule			FY 2015			FY 2016			FY 2017			FY 2018		To	Comple	te		Total	
Item Nomenclature*			Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
THAAD	P5, P5A, P21	В	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
Total Gross/Weapon System Cost					449.665			490.621			468.607			485.588			1,901.341			6,549.528

^{*}Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P48 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P40.

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".

LI MD07 - THAAD Missile Defense Agency UNCLASSIFIED Page 2 of 10

P-1 Line #25

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Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency MDAP/MAIS Code: 362

MDAP/MAIS Code: P-1 Line Item Nomenclature:

MD07 - THAAD

Item Nomenclature (Item Number - Item

Name, DODIC):

Date: April 2013

THAAD

Resource Summary	Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ 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
	(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	d 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

[#]FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

		Al	I Prior Yea	rs		FY 2012			FY 2013		F'	Y 2014 Bas	se	F	Y 2014 OC	0	F	Y 2014 Tota	al
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
Hardware Cost						`		,						,					
Recurring Cost																			
† Interceptor	В	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	В	9.139	18	164.500	6.125	6	36.751	-	-	-	7.743	6	46.457	-	-	-	7.743	6	46.457
Support Equipment	В	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	В	10.100	6	60.600	8.910	2	17.820	-	-	-	9.270	2	18.540	-	-	-	9.270	2	18.540
Total Recurring Cost				1,107.323			574.080			398.634			491.890			-			491.890
Total Hardware Cost				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
Total Support Cost				0.000			30.570			62.094			89.115			-			89.115
Gross Weapon System Cost				1,107.323			604.650			460.728			581.005			-			581.005

Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense

362

MDAP/MAIS Code: P-1 Line Item Nomenclature:

MD07 - THAAD

Date: April 2013

Item Nomenclature (Item Number - Item

Name, DODIC):

THAAD

			FY 2015			FY 2016			FY 2017			FY 2018		T	o Complete	е		Total Cost	t
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
Hardware Cost																			,
Recurring Cost																			
† Interceptor	В	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	5,047.73
† Launcher	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.257	30	247.70
Support Equipment	В	3.001	1	3.001	-	-	-	-	-	-	-	-	-	-	-	-	48.417	6	290.49
† TFCC Tactical Station Group	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.696	10	96.96
Total Recurring Cost				389.518			387.026			388.183			410.171			1,536.072			5,682.89
Total Hardware Cost				389.518			387.026			388.183			410.171			1,536.072			5,682.89
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	757.78
Training		19.088	1	19.088	22.769	1	22.769	9.444	1	9.444	-	-	-	-	-	-	18.142	6	108.85
Total Support Cost				60.147			103.595			80.424			75.417			365.269			866.63
Gross Weapon System Cost				449.665			490.621			468.607			485.588			1,901.341			6,549.52

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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P-1 Line #25

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

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Nomenclature:

Item Nomenclature:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency MD07 - THAAD

Item Nomenclature: THAAD

0 0	FY	Contractor and Location	Method/Type, or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost			RFP Issue Date
	2010	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Mar 2011	Jul 2012	26	14.480	Υ		Oct 2009
	2011	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Mar 2011	Jul 2013	22	12.100	Υ		Oct 2009
	2012	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Aug 2012	Oct 2014	44	11.610	Υ		Aug 2011
	2013	Lockheed Martin / Troy, AL	SS / FPIF	MDA, Huntsville, AL	Jul 2013	Oct 2015	36	11.020	Υ		
	2014	Lockheed Martin / Troy, AL	SS / FFP	MDA, Huntsville, AL	Jan 2014	Jul 2016	36	10.820	Υ		Jan 2013
	2010	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	May 2011	Apr 2013	6	9.170	Υ		Oct 2009
	2011	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	May 2011	Oct 2013	6	9.130	Υ		Oct 2009
	2011	Lockheed Martin / Camden, AR	SS / FPIF	MDA, Huntsville, AL	Jul 2012	May 2014	6	9.130	Υ		Aug 2011
	2012	Lockheed Martin / Camden, AR	SS / FPIF	MDA, Huntsville, AL	Jul 2012	Nov 2014	6	7.490	Υ		Aug 2011
	2014	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Jan 2014	Oct 2015	6	9.190	Υ		Jan 2013
	2011	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Mar 2011	May 2013	4	10.100	Υ		Oct 2009
	2011	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Jul 2012	Aug 2014	2	10.100	Υ		Aug 2011
	2012	Lockheed Martin / Camden, AR	SS / FPIF	MDA, Huntsville, AL	Jul 2012	Oct 2014	2	9.260	Υ		Aug 2011
	2014	Lockheed Martin / Camden, AR	SS / FFP	MDA, Huntsville, AL	Jan 2014	Jan 2016	2	9.270	Υ		Jan 2013
		O FY 2010 2011 2012 2013 2014 2010 2011 2011 2012 2014 2011 2011	O FY Contractor and Location 2010 Lockheed Martin / Troy, AL 2011 Lockheed Martin / Troy, AL 2012 Lockheed Martin / Troy, AL 2013 Lockheed Martin / Troy, AL 2014 Lockheed Martin / Troy, AL 2010 Lockheed Martin / Camden, AR 2011 Lockheed Martin / Camden, AR 2011 Lockheed Martin / Camden, AR 2012 Lockheed Martin / Camden, AR 2014 Lockheed Martin / Camden, AR 2011 Lockheed Martin / Camden, AR 2011 Lockheed Martin / Camden, AR 2012 Lockheed Martin / Camden, AR 2012 Lockheed Martin / Camden, AR 2012 Lockheed Martin / Camden, AR 2013 Lockheed Martin / Camden, AR 2014 Lockheed Martin / Camden, AR 2015 Lockheed Martin / Camden, AR 2016 Lockheed Martin / Camden, AR 2017 Lockheed Martin / Camden, AR 2018 Lockheed Martin / Camden, AR 2019 Lockheed Martin / Camden, AR	O FY Contractor and Location Funding Vehicle 2010 Lockheed Martin / Troy, AL SS / FPIF 2011 Lockheed Martin / Troy, AL SS / FPIF 2012 Lockheed Martin / Troy, AL SS / FPIF 2013 Lockheed Martin / Troy, AL SS / FPIF 2014 Lockheed Martin / Troy, AL SS / FFP 2010 Lockheed Martin / Camden, AR SS / FFP 2011 Lockheed Martin / Camden, AR SS / FPIF 2011 Lockheed Martin / Camden, AR SS / FPIF 2012 Lockheed Martin / Camden, AR SS / FFP 2014 Lockheed Martin / Camden, AR SS / FFP 2011 Lockheed Martin / Camden, AR SS / FFP 2011 Lockheed Martin / Camden, AR SS / FFP 2012 Lockheed Martin / Camden, AR SS / FFP 2012 Lockheed Martin / Camden, AR SS / FFP 2014 Lockheed Martin / Camden, AR SS / FFP	O FY Contractor and Location Funding Vehicle of PCO 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL 2012 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL 2013 Lockheed Martin / Troy, AL SS / FFIF MDA, Huntsville, AL 2014 Lockheed Martin / Troy, AL SS / FFP MDA, Huntsville, AL 2010 Lockheed Martin / Troy, AL SS / FFP MDA, Huntsville, AL 2011 Lockheed Martin / Camden, AR SS / FFP MDA, Huntsville, AL 2011 Lockheed Martin / Camden, AR SS / FPIF MDA, Huntsville, AL 2012 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL 2014 Lockheed Martin / Camden, AR SS / FFP MDA, Huntsville, AL 2011 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL 2011 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL 2012 Lockheed Martin / Camden, AR SS	O FY Contractor and Location Funding Vehicle of PCO Award Date 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Aug 2012 2012 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Jul 2013 2013 Lockheed Martin / Troy, AL SS / FFIF MDA, Huntsville, AL Jul 2013 2014 Lockheed Martin / Troy, AL SS / FFIF MDA, Huntsville, AL Jan 2014 2010 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL May 2011 2011 Lockheed Martin / Camden, AR SS / FFIF MDA, Huntsville, AL Jul 2012 2012 Lockheed Martin / Camden, AR SS / FFIF MDA, Huntsville, AL Jul 2012 2014 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL Jul 2012 2014 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL Jul 2012 2011 Lockheed Martin / Camden, AR SS / FFIP </td <td>O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Aug 2012 Oct 2014 2013 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Jul 2013 Oct 2015 2014 Lockheed Martin / Troy, AL SS / FFIF MDA, Huntsville, AL Jul 2013 Oct 2015 2010 Lockheed Martin / Camden, AR SS / FFP MDA, Huntsville, AL May 2011 Apr 2013 2011 Lockheed Martin / Camden, AR SS / FFP MDA, Huntsville, AL May 2011 Oct 2013 2011 Lockheed Martin / Camden, AR SS / FPIF MDA, Huntsville, AL Jul 2012 May 2014 2012 Lockheed Martin / Camden, AR SS / FPIF MDA, Huntsville, AL Jul 2012 Nov 2014 2014 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL Jul 2012 Nov 2014</td> <td>O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery (Each) 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 26 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2013 22 2012 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Aug 2012 Oct 2014 44 2013 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Jul 2013 Oct 2015 36 2014 Lockheed Martin / Troy, AL SS / FFP MDA, Huntsville, AL Jul 2016 36 2010 Lockheed Martin / Camden, AR SS / FFP MDA, Huntsville, AL May 2011 Apr 2013 6 2011 Lockheed Martin / Camden, AR SS / FFP MDA, Huntsville, AL May 2011 Oct 2013 6 2012 Lockheed Martin / Camden, AR SS / FPIF MDA, Huntsville, AL Jul 2012 Nov 2014 6 2014 Lockheed Martin / Camden,</td> <td>O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery (Each) (SM) 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 26 14.480 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2013 22 12.100 2012 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Aug 2012 Oct 2014 44 11.610 2013 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Jul 2013 Oct 2015 36 11.020 2014 Lockheed Martin / Troy, AL SS / FFIP MDA, Huntsville, AL Jul 2016 36 10.820 2010 Lockheed Martin / Camden, AR SS / FFP MDA, Huntsville, AL May 2011 Apr 2013 6 9.170 2011 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL May 2011 Oct 2013 6 9.130 2012 Lockheed Martin / Camden, AR SS / FFIP<!--</td--><td>O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery (Each) (SM) Now? 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 26 14.480 Y 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2013 22 12.100 Y 2012 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Aug 2012 Oct 2014 44 11.610 Y 2013 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Jul 2013 Oct 2015 36 11.020 Y 2014 Lockheed Martin / Troy, AL SS / FFIP MDA, Huntsville, AL Jul 2016 36 10.820 Y 2010 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL May 2011 Apr 2013 6 9.170 Y 2011 Lockheed Martin / Camden, AR SS / FFIF MDA, Huntsville, AL Jul 2012 May 2014 6<!--</td--><td>O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery (Each) Now? 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Avail 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 26 14.480 Y 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Hunt</td></td>	O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery (Each) (SM) Now? 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 26 14.480 Y 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2013 22 12.100 Y 2012 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Aug 2012 Oct 2014 44 11.610 Y 2013 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Jul 2013 Oct 2015 36 11.020 Y 2014 Lockheed Martin / Troy, AL SS / FFIP MDA, Huntsville, AL Jul 2016 36 10.820 Y 2010 Lockheed Martin / Camden, AR SS / FFIP MDA, Huntsville, AL May 2011 Apr 2013 6 9.170 Y 2011 Lockheed Martin / Camden, AR SS / FFIF MDA, Huntsville, AL Jul 2012 May 2014 6 </td <td>O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery (Each) Now? Avail 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 26 14.480 Y 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Hunt</td>	O FY Contractor and Location Funding Vehicle of PCO Award Date Delivery (Each) Now? Avail 2010 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Mar 2011 Jul 2012 26 14.480 Y 2011 Lockheed Martin / Troy, AL SS / FPIF MDA, Huntsville, AL Hunt

- 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.

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

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

Date: April 2013

Item Nomenclature:
THAAD

			ost Eleme Units in Ea									Fiscal Y	ear 2011											Fiscal Y	ear 2012						
N					ACCEP PRIOR	BAL								C	alendar	Year 201	11								Caler	dar Yea	2012				
O F C R O #	:	FY SEI		PROC QTY	TO 1 OCT	DUE AS OF 1 OCT	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	U J	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	N N	J J	A U G	S E P	B A L
Interc	epto	r - Lot 1																													
1		2010 MD/	A	26	-	26	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
Interc	epto	r - Lot 2		·	·																										
2		2011 MD/	A	22	-	22	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Interc	epto	r - Lot 4				•																			,						
3		2012 MD/	A	44	-	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	
Interc	epto	r - Lot 5																													
4		2013 MD/	A	36	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Interc	epto	r - Lot 6					,																								
5		2014 MD/	A	36	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Launc	cher -	- Lot 1					,																								
6		2010 MD/	A	6	-	6	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Launc	her -	- Lot 2					-																								
7		2011 MD/	A	6	-	6	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Launc	cher -	- Lot 3		,			,																								
8		2011 MD/	A	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	
Launc	cher -	- Lot 4																													,
9		2012 MD/	A	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	
Launc	cher -	- Lot 6		,			,																								,
10) :	2014 MD/	A	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TFCC	Tac	tical Station	Group - L	ot 2			,																								,
11	ı [:	2011 MD/	A	4	-	4	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TFCC	Tac	tical Station	Group - L	_ot 3			,																								,
12	2 :	2011 MD/	A	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	
TFCC	Tac	tical Station	Group - L	_ot 4																											
13	3 :	2012 MD/	A	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	
TFCC	Tac	tical Station	Group - L	_ot 6							,																				
14	. :	2014 MD/	A	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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P-1 Line #25

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
Agency

Cost Elements
(Units in Each)

Fiscal Year 2013

Date: April 2013

Item Nomenclature:
THAAD

THAAD

		-Lot 1																													
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nterc	eptor ·	- Lot 4																													
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P-1 Line #25

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Exh	ibit	P-21	l, Bud	lget P	roduc	ction	Sche	dule	: PB 2	2014 N	Missil	e Def	ense	Agen	су										Dat	e: Ap	ril 20	13				
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Volume 2b - 8

Ex	hibit P	-21, Buc	dget P	rodu	ction	Sche	dule:	PB 2	014 N	/lissile	e Defe	ense .	Agen	СУ									Date	: Apr	il 201	3				
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P-1 Line #25

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
Agency

Date: April 2013

Item Nomenclature:
THAAD

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
						Ini	tial			Reo	rder	
MFR #	MFR Name - Location	MSR	1-8-5	MAX	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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P-1 Line #25

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

MD09 - AEGIS BMD

P-1 Line Item Nomenclature:

ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0604881C, 0604880C. 0603892C

Other Related Program Elements: 0603892C, 0604881C.

0604880C

P-1 Line #26

MDAP/MAIS Code(s):

IIID7 II 7III7 IIO GGGG(G)I												
Resource Summary	Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ 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
	(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)		1	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (Units in Millions)	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 (Units in Millions)	14.898	13.514	13.435	11.170	-	11.170	10.371	10.351	12.122	12.431	-	11.940

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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 quidance 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 (gtv 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

UNCLASSIFIED

^{##} The FY 2014 OCO Request will be submitted at a later date

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

MD09 - AEGIS BMD

P-1 Line Item Nomenclature:

ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0604881C, 0604880C, 0603892C

Other Related Program Elements: 0603892C, 0604881C,

0604880C

MDAP/MAIS Code(s):

Item Sche	edule		P	rior Year	s		FY 2012			FY 2013		FY	2014 Ba	se	FY	2014 O	co	FY	2014 Tot	tal
Item Nomenclature*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
Aegis BMD	P5, P5A, P21	В	14.898	41	610.837	-	28	378.393	-	29	389.626	11.170	52	580.814	-	-	-	11.170	52	580.814
Total Gross/Weapon System Cost					610.837			378.393			389.626			580.814			-			580.814
Item Scho	dule			FY 2015			FY 2016			FY 2017			FY 2018		To	Comple	te		Total	
Item Nomenclature*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
Item Nomenclature* Aegis BMD	Exhibits P5, P5A, P21				(\$ M)									(\$ M)						

^{*}Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P48 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

Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency

362

MDAP/MAIS Code: P-1 Line Item Nomenclature:

MD09 - AEGIS BMD

Item Nomenclature (Item Number - Item

Name, DODIC): Aegis BMD

Date: April 2013

Resource Summary	Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ 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
	(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed 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

[#]FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The EV 2014 OCO Request will be submitted at a later date

		All	I Prior Yea	rs		FY 2012			FY 2013		F۱	/ 2014 Bas	se	F	/ 2014 OC	0	F	/ 2014 Tota	al
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
Flyaway Cost								,							·			,	
Recurring Cost																			
† SM-3 Block IA Procurement	В	14.898	41	610.837	11.138	14	155.928	-	-	-	-	-	-	-	-	-	-	-	-
† SM-3 Block IB Procurement	В	0.000	0	0.000	13.402	14	187.625	11.116	29	322.351	10.070	52	523.641	-	-	-	10.070	52	523.64
SM-3 Block IIA	В	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Recurring Cost				610.837			343.553			322.351			523.641			-			523.64
Total Flyaway Cost				610.837			343.553			322.351			523.641			-			523.64
Hardware Cost								•			,			·	·				
Recurring Cost																			
ABMD 3.6.1 Hardware and Installs	В	0.000	0	0.000	15.000	1	15.000	7.500	1	7.500	-	-	-	-	-	-	-	-	-
Canisters Procurement SM-3 Block IA/IB	В	0.000	0	0.000	0.265	28	7.419	0.807	29	23.400	0.349	52	18.173	-	-	-	0.349	52	18.17
Canisters Procurement SM-3 Block IIA	В	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Recurring Cost				0.000			22.419			30.900			18.173			-			18.17
Total Hardware Cost				0.000			22.419			30.900			18.173			-			18.17

LI MD09 - AEGIS BMD Missile Defense Agency **UNCLASSIFIED** Page 3 of 10

P-1 Line #26

Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

746.712

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major

362

MDAP/MAIS Code: P-1 Line Item Nomenclature:

MD09 - AEGIS BMD

Date: April 2013

Item Nomenclature (Item Number - Item

Name, DODIC):

Aegis B	M	
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Equipment / BSA Agency	17:	Major E	quipmen	t, Missil	e Defens	se								,	Aegis BM	1D			
		Al	l Prior Yea	rs		FY 2012	1		FY 2013		F	Y 2014 Bas	se	F	Y 2014 OC	0	F	Y 2014 Tota	al
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	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
Total Support Cost				0.000			12.421			36.375			39.000			-			39.000
Gross Weapon System Cost				610.837			378.393			389.626			580.814			-			580.814
			FY 2015			FY 2016			FY 2017			FY 2018		Т	o Complet			Total Cost	<u> </u>
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
Flyaway Cost																			
Recurring Cost																			
† SM-3 Block IA Procurement	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.941	55	766.765
† SM-3 Block IB Procurement	В	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	В	-	-	-	-	-	-	24.818	12	297.816	23.266	16	372.251	-	-	-	23.931	28	670.067
Total Recurring Cost				682.528			674.948			946.846			1,021.283			-			5,125.98
Total Flyaway Cost				682.528			674.948			946.846			1,021.283			-			5,125.987
Hardware Cost																	·		
Recurring Cost																			
ABMD 3.6.1 Hardware and Installs	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.250	2	22.500
Canisters Procurement SM-3 Block IA/IB	В	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	В	-	-	-	-	-	-	0.651	12	7.814	0.662	16	10.595	-	-	-	0.657	28	18.409
Total Recurring Cost				20.499			23.571			33.022			33.159			-			181.74
Total Hardware Cost				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
Total Support Cost				43.685			46.740			38.375			39.526			-			256.122
								1				1							

LI MD09 - AEGIS BMD Missile Defense Agency

Gross Weapon System

Cost

UNCLASSIFIED Page 4 of 10

745.259

1,018.243

P-1 Line #26

1,093.968

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5,563.852

Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agen	су		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 (Item Number - Ite Name, DODIC): Aegis BMD
P-5 Remarks:			
N/A			

LI MD09 - AEGIS BMD Missile Defense Agency UNCLASSIFIED
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Exhibit P-5A, Budget Procurement History and Planning: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
Agency

Date: April 2013

Item Nomenclature:

AD09 - AEGIS BMD

Aegis BMD

Cost Elements († indicates the presence of a P-21)	0 C 0	FY	Contractor and Location	Method/Type, or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	RFP Issue Date
†SM-3 Block IA Procurement		2011	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Jan 2011	Oct 2013	23	10.310	Υ	Nov 2010
†SM-3 Block IA Procurement		2012	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Jan 2012	Jul 2014	14	11.140	Υ	Aug 2011
†SM-3 Block IB Procurement		2012	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Oct 2011	Oct 2013	14	13.400	Υ	Aug 2011
†SM-3 Block IB Procurement		2013	Raytheon / Tucson, AZ	C / CPIF	Dahlgren, VA	Oct 2012	Oct 2014	29	11.120	Υ	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

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
Agency

Date: April 2013

Item Nomenclature:

APRIL Budget Production Schedule: PB 2014 Missile Defense Agency

Date: April 2013

Item Nomenclature:

APRIL Budget Production Schedule: PB 2014 Missile Defense Agency

_	-																														
			Cost Elen (Units in E									Fiscal \	'ear 2011											Fiscal Y	ear 2012						
					ACCEP									C	alendar	Year 201	11								Calen	dar Year	2012				
O F C F O #	:	FY	SERVICE [‡]	PROC QTY	PRIOR TO 1 OCT 2010	BAL DUE AS OF 1 OCT	0 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 n	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 Pro	curement	,	,													,					,						,		
All Pri	or Yea	ars Del	liveries: 18																												
1	20	011	MDA	23	-	23	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
2	20	012	MDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	-	-	-	14
SM-3	Block	IB Pro	curement																					,					,		
3	20	012	MDA	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	A -	-	-	-	-	-	-	-	-	-	-	-	14
3	20	013 [MDA	29	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29
3	20	014	MDA	52	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	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
						ι																									

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency Date: April 2013 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Nomenclature: Item Nomenclature: 0300D: Procurement, Defense-Wide / BA 01: Major Aegis BMD MD09 - AEGIS BMD Equipment / BSA 17: Major Equipment, Missile Defense Agency Cost Elements (Units in Each) Fiscal Year 2013 Fiscal Year 2014 ACCEP Calendar Year 2013 Calendar Year 2014 М PRIOR BAL 0 C 0 DUE F TO 1 В PROC OCT AS OF C 0 Е Е Α Р A Y Ü Ü U E С 0 V Е Е A R Р Ü U U E R Α Α A Y Α FY SERVICE[‡] # QTY 1 OCT 2012 G SM-3 Block IA Procurement All Prior Years Deliveries: 18 2011 MDA 23 14 14 2 2 2 2012 MDA 1 9 -SM-3 Block IB Procurement 3 MDA 14 3 2012 3 2013 MDA 29 29 Α -29 3 52 52 52 2014 MDA Α -S E В A U A P A U E Ρ A Y Ū Č 0 E E Ū Ū Ē С 0 Α Ε Α U Α Α Α Α R R R Р В G Ρ Ν R N G

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E	xhik	it P-	-21, Buc	dget P	roduc	ction	Sche	dule:	PB 2	2014 N	/lissile	Def	ense .	Agen	су									Date	: Apr	il 201	3				
03	3001	D: Pro	ation / B ocurement / BSA	ent, D	efense	e-Wid	e / BA	01:	Major	•	:			e Item AEGI			lature):							Nomis BM		ature	:			
	gen		I/ DSA	I / . IVI	ajor 🗅	quipri	ieni, iv	/IISSII	е рег	ense																					
	Jen	<i>у</i>	Cost Ele	ments																											
			(Units in			1	_		_	1		Fiscal Y	ear 2015								_			Fiscal Y	ear 2016						
	м				ACCEP PRIOR	BAL							T	T	Calenda	r Year 2					1				Calen	ndar Year	2016				
C	M F R			PROC		AS OF	0 0	N O	D E	J A	F E	M A	A P	M A	Ŋ	J	U	S E	C	N O	D E	J A	F E	M A	A P	M A Y	U U	n n	A U	S E	B A
	#	FI	SERVICE [‡] Procurement	QTY	2014	1 OCT	Т	V	С	N	В	R	R	Y	N	L	G	Р	Т	V	С	N	В	R	R	Υ	N	L	G	Р	L
_			Deliveries: 18																												
	1	2011	MDA	23	23	-																									-
	2	2012	MDA	14			3	3	3																						-
_			Procurement																												
	3	2012		14															٦												-
_	3		MDA MDA	29 52		29 52	_	2	3	2	2	- 3		2	-	3 -		3 3		4 4	5	4	4	5	4	4	5	4	4	5	-
	3	2014	IVIDA	32		32		N .	D	J	F	M	A	м	J	J	_			N 4	D	J 4	F ⁴	M	Α 4	M 4	J	J 4	Α 4	S	В
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LI MD09 - AEGIS BMD Missile Defense Agency

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

		Product	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
						Init	tial			Reo	rder	
MFR	MFR Name - Location	MSR	1-8-5	MAX	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
#						ALI Allei Oct I	•		10 001 1	ALI AILEI OCL I	•	
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

[&]quot;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).

LI MD09 - AEGIS BMD Missile Defense Agency **UNCLASSIFIED**

P-1 Line #26 **Volume 2b - 20**

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: MD11 - BMDS AN/TPY-2 Radars

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):

Resource Summary	Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	191.081	380.195	217.244	62.000	-	62.000	80.250	21.000	35.000	35.000	-	1,021.770

	(The following	g Resource Sumi	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)			
Initial Spares (\$ in Millions)	-	-	10.177	-	-	-	-	-	-	-	-	10.177
Flyaway Unit Cost (Units in Millions)	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 (Units in Millions)	191.081	190.098	217.244	-	-	-	-	-	-	-	-	255.443

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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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^{##} The FY 2014 OCO Request will be submitted at a later date

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: MD11 - BMDS AN/TPY-2 Radars

William Major Mile III Billibe 7 (14) 11 1

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 Sche	edule		Р	rior Year	rs		FY 2012			FY 2013		FY	2014 Ba	ise	FY	2014 O	co	FY	2014 To	otal
Item Nomenclature*	Exhibits	ID CD	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost												
BMDS AN/TPY-2 Radars	P5, P5A, P21	В	191.081	1	191.081	-	2	380.195	-	1	217.244	-	-	62.000	-	-	-	-	-	62.000
Total Gross/Weapon System Cost					191.081			380.195			217.244			62.000			-			62.000
Item Scho	edule			FY 2015			FY 2016			FY 2017			FY 2018		To	Comple	ete		Total	
Item Nomenclature*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
BMDS AN/TPY-2 Radars	P5, P5A, P21	В	-	-	80.250	-	-	21.000	-	-	35.000	-	-	35.000	-	-	-	255.443	4	1,021.770
Total Gross/Weapon System Cost					80.250			21.000			35.000			35.000			-			1,021.770

*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P48 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P40.

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

Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense

Agency

362

MDAP/MAIS Code: P-1 Line Item Nomenclature:

MD11 - BMDS AN/TPY-2 Radars

Item Nomenclature (Item Number - Item

Volume 2b - 23

Name, DODIC):

Date: April 2013

Resource Summary	Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	191.081	380.195	217.244	62.000	-	62.000	80.250	21.000	35.000	35.000	-	1,021.770
	(The following	g Resource Sum	mary rows are fo	or informational p	ourposes only. Th	he corresponding	g budget request	s are documente	ed elsewhere.)		· ·	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost	191.081	190.098	217.244	-	-	-	-	-	-	-	-	255.443

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

		Al	l Prior Yea	rs		FY 2012			FY 2013		F	/ 2014 Bas	se	F	/ 2014 OC	0	F	Y 2014 Tot	al
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)															
Hardware Cost								,						,					
Recurring Cost																			
† Antenna Equipment Unit (AEU)	В	144.285	1	144.285	127.663	2	255.326	143.302	1	143.302	-	-	-	-	-	-	-	-	-
† Cooling Equipment Unit (CEU)	В	7.800	1	7.800	6.789	2	13.578	7.800	1	7.800	-	-	-	-	-	-	-	-	-
† Critical Spares	В	0.000	0	0.000	-	-	-	-	-	-	6.200	1	6.200	-	-	-	6.200	1	6.20
† Electronic Equipment Unit (EEU)	В	23.398	1	23.398	20.367	2	40.734	23.190	1	23.190	-	-	-	-	-	-	-	-	-
† Electronic Equipment Unit (EEU) Modification Kit	В	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
† Float Antenna Equipment Unit (AEU)	В	0.000	0	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
† Float Cooling Equipment Unit (CEU)	В	0.000	0	0.000	7.136	1	7.136	-	-	-	7.800	1	7.800	-	-	-	7.800	1	7.80
† Float Electronic Equipment Unit (EEU)	В	0.000	0	0.000	20.264	1	20.264	-	-	-	-	-	-	-	-	-	-	-	-
† Forward-Based Mode Prime Power Units (PPU)	В	0.000	0	0.000	-	-	-	9.124	3	27.371	-	-	-	-	-	-	-	-	-

Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major Equipment, Missile Defense Agency

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MDAP/MAIS Code: P-1 Line Item Nomenclature:

MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature (Item Number - Item

Name, DODIC):

BMDS AN/TPY-2 Radars

• •																			
		Al	Prior Yea	irs		FY 2012	•		FY 2013		F`	Y 2014 Ba	se	F'	Y 2014 OC)	F`	Y 2014 Tot	al
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
† Prime Power Unit (PPUs - 2 each radar system)	В	15.598	1	15.598	13.579	2	27.157	15.581	1	15.581	-	-	-	-	-	-	-	-	-
† Transmit/Receive Integrated Microwave Module (TRIMMs)	В	0.000	0	0.000	-	-	-	-	-	-	48.000	1	48.000	-	-	-	48.000	1	48.000
Total Recurring Cost				191.081			364.195			217.244			62.000			-			62.000
Total Hardware Cost				191.081			364.195			217.244			62.000			-			62.000
Support Cost																			
Program Support*		0.000	0	0.000	16.000	1	16.000	-	-	-	-	-	-	-	-	-	-	-	-
Total Support Cost				0.000			16.000			-			-			-			-
Gross Weapon System Cost				191.081			380.195			217.244			62.000			-			62.000

			FY 2015			FY 2016			FY 2017			FY 2018		To	o Complete	•		Total Cost	
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
Hardware Cost					•						•								
Recurring Cost																			
† Antenna Equipment Unit (AEU)	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	135.728	4	542.91
† Cooling Equipment Unit (CEU)	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.295	4	29.17
† Critical Spares	В	-	-	-	7.000	1	7.000	-	-	-	-	-	-	-	-	-	6.600	2	13.20
† Electronic Equipment Unit (EEU)	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.831	4	87.32
† Electronic Equipment Unit (EEU) Modification Kit	В	7.000	1	7.000	7.000	2	14.000	7.000	2	14.000	7.000	2	14.000	-	-	-	7.000	7	49.00
† Float Antenna Equipment Unit (AEU)	В	73.250	1	73.250	-	-	-	-	-	-	-	-	-	-	-	-	73.250	1	73.25
† Float Cooling Equipment Unit (CEU)	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.468	2	14.93
† Float Electronic Equipment Unit (EEU)	В	-	-	-	-	-	-	21.000	1	21.000	-	-	-	-	-	-	20.632	2	41.26
† Forward-Based Mode Prime Power Units (PPU)	В	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.124	3	27.37

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Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
Agency

Date: April 2013

Item Nomenclature (Item Number - Item N

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

P-5 Remarks:

N/A

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

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: MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature:

BMDS AN/TPY-2 Radars

Cost Elements († indicates the presence of a P-21)	0 0	FY	Contractor and Location	Method/Type, or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Date Revsn Now? Avail	RFP Issue Date
†Antenna Equipment Unit (AEU)		2010	Raytheon / Woburn, MA	SS / FFP	MDA, Huntsville, AL	Jun 2010	Dec 2012	1	144.290		Date
†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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P-1 Line #27

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

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:

MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature:

Cost Elements († indicates the presence of a P-21)	0 C 0	FY	Contractor and Location	Method/Type, or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	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		

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

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:

MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature:

BMDS AN/TPY-2 Radars

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		1	Cost Elem (Units in E		1						_	Fiscal \	ear 2010											Fiscal Y	ear 2011						
	М				ACCEP				1						Calendar	Year 20	10			r	,			1	Cale	ndar Yea	2011				
0 0	F R	FY	SERVICE [‡]	PROC QTY	TO 1 OCT 2009	DUE AS OF 1 OCT	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
Aı	ntenna	Equipm	nent Unit (AEU))				,												,			,					,			
	1	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	· ·
	1	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	:
	1	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
C	ooling	Equipme	ent Unit (CEU)		'															,											
	2	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	:
	2	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cı	ritical	Spares																						•		•					
	3	2014	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	2016	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EI	ectror	ic Equip	ment Unit (EE	U)																											
	4	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	4	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
EI	ectror	ic Equip	ment Unit (EE	U) Modit	fication Ki	t																									
	5	2015	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	2016	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	5	2017	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	5	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
FI	oat Ar	ntenna E	quipment Unit	(AEU)																											
	6	2015	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FI	oat Co	ooling Eq	quipment Unit (CEU)																											
	7	2012	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	2014	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FI	oat El	ectronic	Equipment Uni	it (EEU)																											
	8	2012	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	2017	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fo	orward	I-Based I	Mode Prime Po	ower Un	its (PPU)																										
	9	2013	MDA	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	;
Pı	rime P	ower Un	nit (PPUs - 2 ea	ch rada	r 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	N N	J U L	A U G	S E P	B A L

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P-1 Line #27

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

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:

MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature:

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			Cost Elen (Units in I									Fiscal Y	ear 2010)										Fiscal Y	ear 2011						
					ACCEP										Calendar	Year 201	0								Caler	ndar Yea	r 2011				
0 0 0	M F R #	FY	SERVICE [‡]	PROC QTY	PRIOR TO 1 OCT 2009	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J U	A U G	S E P	0 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	A U G	S E P	B A L
	10	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	10	2012	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	10	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	10	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Tra	ınsmi	/Receive	Integrated N	/licrowave	Module	(TRIMMs	5)																,	,							
	11	2014	MDA	1	-	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

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

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:

MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature:

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		Г	Cost Elem (Units in E						_			Fiscal Y	ear 2012								_			Fiscal Y							
	М				ACCEP PRIOR	BAL	_		1 _			T				Year 201				T	1_			T		ndar Yea		Π.			_
0 0	F R #	FY	SERVICE [‡]	PROC QTY	TO 1 OCT 2011	AS OF 1 OCT	O C T	N O V	E C	J A N	F E B	M A R	A P R	M A Y	N N J	J U L	U G	S E P	O C T	N O V	E C	J A N	F E B	M A R	A P R	M A Y	J U N	n n	A U G	S E P	B A L
Ar	ntenna	Equipm	ent Unit (AEU)									'																		
	1	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										-
	1	2012	MDA	2	-	2	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	1	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	1
Co	ooling	Equipme	ent Unit (CEU)																												
	2	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										-
	2	2012	MDA	2	-	2	-	-	Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	2	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	1
Cr	itical S	Spares	1																												
	3	2014	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	3	2016	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
El	ectron	ic Equip	ment Unit (EE	U)											,																,
	4	2010	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										-
	4	2012	MDA	2	-	2	-	-	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	4	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	1
El	ectron	ic Equip	ment Unit (EE	U) Modif	fication Ki	t		,	'						,																,
	5	2015	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	5	2016	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	5	2017	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	5	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Fle	oat Ar	itenna E	quipment Unit	(AEU)					•																						
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Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

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:

MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature:

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											Fiscal Y	ear 2012											Fiscal Y	ear 2013						
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0	2013	MDA	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Α -	-	-	-	-	-	-	-	-	-	
0	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
smit	/Receive	Integrated M	licrowave	Module	(TRIMMs)								,				,												
1	2014	MDA	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	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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Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense AgencyDate: April 2013Appropriation / Budget Activity / Budget Sub Activity:
0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
AgencyP-1 Line Item Nomenclature:
MD11 - BMDS AN/TPY-2 RadarsItem Nomenclature:
BMDS AN/TPY-2 Radars

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Cooli	ng Ed	quipmen	nt Unit (CEU)															,												
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Electr	ronic	Equipm	ent Unit (EE	EU)								•									•										
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5		2018	MDA	2	-	2	- 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
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Float	Cool	ling Equi	ipment Unit	(CEU)	•							•									•										
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Prime	e Pow	ver Unit	(PPUs - 2 e	ach rada	r system)				'												1	-									
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LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency UNCLASSIFIED
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P-1 Line #27

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

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:

MD11 - BMDS AN/TPY-2 Radars

Date: April 2013

Item Nomenclature:

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											Fiscal Y	ear 2014											Fiscal Y	ear 2015						
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10	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
smit	/Receive	Integrated M	icrowave	Module	(TRIMMs)			,					,			`				-			,						
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P-1 Line #27

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
Agency

Date: April 2013

Item Nomenclature:

BMDS AN/TPY-2 Radars

BMDS AN/TPY-2 Radars

			Cost Elem (Units in E									Fiscal Y	ear 2016											Fiscal Y	ear 2017						
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	10	2010	MDA	1	1	-									,																-
	10	2012	MDA	2	2	-																								-	-
	10	2013	MDA	1	1	-																									-
	10	2018	MDA	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Т	ansmi	t/Receive	e Integrated M	licrowave	Module	(TRIMMs)		,						,			,					,					,	,		
	11	2014	MDA	1	1	-																									-
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Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency Date: April 2013 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Nomenclature: Item Nomenclature: 0300D: Procurement, Defense-Wide / BA 01: Major MD11 - BMDS AN/TPY-2 Radars BMDS AN/TPY-2 Radars Equipment / BSA 17: Major Equipment, Missile Defense Agency **Cost Elements** Fiscal Year 2018 Fiscal Year 2019 (Units in Each) ACCEP Calendar Year 2018 Calendar Year 2019 PRIOR М BAL 0 C 0 DUE F TO 1 PROC OCT AS OF C Е Е Р Ü Ü U E C 0 Е Е Р Ü U U E 0 Α Α A Y Α Α Α Α SERVICE[‡] FY QTY # 2017 1 OCT G Antenna Equipment Unit (AEU) 2010 MDA 1 2012 MDA 2 2 1 1 2013 MDA -Cooling Equipment Unit (CEU) MDA 2 2010 2 MDA 2 2 2012 -2 2013 MDA Critical Spares 3 2014 MDA MDA 3 2016 Electronic Equipment Unit (EEU) 2010 MDA 4 2012 MDA 2 -4 2013 MDA Electronic Equipment Unit (EEU) Modification Kit 5 2015 5 2016 MDA 2 2 5 MDA 2 2 2017 5 MDA Α -2018 Float Antenna Equipment Unit (AEU) 2015 MDA 1 6 Float Cooling Equipment Unit (CEU) 2012 MDA 7 2014 Float Electronic Equipment Unit (EEU) MDA 2012 8 2017 MDA Forward-Based Mode Prime Power Units (PPU) 2013 MDA Prime Power Unit (PPUs - 2 each radar system) В U N E С E Е Р U Ε C o v E Е Ρ U U 0 V A N A R A R A Y A L

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P-1 Line #27

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

			Cost Elem (Units in E									Fiscal Y	ear 2018											Fiscal Y	ear 2019						
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Т	ansmi	t/Receive	e Integrated M	licrowave	Module	(TRIMMs)			,				,	,				,		,		,	,	,				`		
	11	2014	MDA	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 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

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency Date: April 2013 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Nomenclature: Item Nomenclature: 0300D: Procurement, Defense-Wide / BA 01: Major MD11 - BMDS AN/TPY-2 Radars BMDS AN/TPY-2 Radars Equipment / BSA 17: Major Equipment, Missile Defense Agency **Cost Elements** Fiscal Year 2020 Fiscal Year 2021 (Units in Each) ACCEP Calendar Year 2020 Calendar Year 2021 PRIOR М BAL 0 C 0 DUE F TO 1 PROC OCT AS OF C Е Е Р Ü Ü U E C 0 Е Е Р Ü U U E 0 Α Α A Y Α Α Α SERVICE[‡] FY QTY # 2019 1 OCT G Antenna Equipment Unit (AEU) 2010 MDA 1 2012 MDA 2 2 1 1 2013 MDA -Cooling Equipment Unit (CEU) MDA 2 2010 2 MDA 2 2 2012 -2 2013 MDA Critical Spares 3 2014 MDA -3 MDA 2016 Electronic Equipment Unit (EEU) 2010 MDA 4 2012 MDA 2 -4 2013 MDA Electronic Equipment Unit (EEU) Modification Kit 5 2015 5 2016 MDA 2 2 5 MDA 2 2 2017 2 5 MDA 2018 Float Antenna Equipment Unit (AEU) 2015 MDA 1 6 Float Cooling Equipment Unit (CEU) 2012 MDA 7 2014 Float Electronic Equipment Unit (EEU) 2012 MDA 8 2017 MDA Forward-Based Mode Prime Power Units (PPU) 2013 MDA Prime Power Unit (PPUs - 2 each radar system) В U N E С 0 V E Е Ρ U Ε C T o v E Е Ρ U U A N A R A R A L

LI MD11 - BMDS AN/TPY-2 Radars Missile Defense Agency

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P-1 Line #27

Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency Date: April 2013 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Nomenclature: Item Nomenclature: 0300D: Procurement, Defense-Wide / BA 01: Major MD11 - BMDS AN/TPY-2 Radars BMDS AN/TPY-2 Radars Equipment / BSA 17: Major Equipment, Missile Defense Agency Cost Elements (Units in Each) Fiscal Year 2020 Fiscal Year 2021 ACCEP Calendar Year 2020 Calendar Year 2021 М PRIOR BAL 0 C 0 DUE F TO 1 В PROC OCT AS OF C 0 V E Е A R Р A Y Ü Ü U E C 0 V Ε Е A R Р U U U E A N A N A Y A L SERVICE[‡] # FY QTY 2019 1 OCT 10 2010 MDA 10 2012 MDA 2 2 -10 2013 MDA 2 2 MDA 2 10 2018 -Transmit/Receive Integrated Microwave Module (TRIMMs)

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Exhibit P-21, Budget Production Schedule: PB 2014 Missile Defense Agency

Date: April 2013

Appropriation / Budget Activity / Budget Sub Activity: 0300D: Procurement, Defense-Wide / BA 01: Major

P-1 Line Item Nomenclature: Item Nomenclature: MD11 - BMDS AN/TPY-2 Radars

BMDS AN/TPY-2 Radars

Equipment / BSA 17: Major Equipment, Missile Defense

Agency

		Product	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
						Init	ial			Reo	der	
MFR #	MFR Name - Location	MSR	1-8-5	MAX	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	-	-	-	-

[&]quot;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).

Exhibit P-40, Budget Item Justification Sheet: PB 2014 Missile Defense Agency

P-1 Line Item Nomenclature:

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

MD73 - Aegis Ashore Phase III

Equipment, Missile Defense Agency

ID Code (A=Service Ready, B=Not Service Ready) ; A

Program Elements for Code B Items: 0208866C

Other Related Program Elements: 0208866C

Date: April 2013

MDAP/MAIS Code(s):

	Prior			FY 2014	FY 2014	FY 2014					То	
Resource Summary	Years	FY 2012	FY 2013 [#]	Base	OCO##	Total	FY 2015	FY 2016	FY 2017	FY 2018	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	-	131.400	-	131.400	256.325	38.574	63.884	71.600	-	561.783
	(The following	g Resource Sum	mary rows are fo	or informational p	urposes only. Th	he corresponding	budget request	s are documente	ed elsewhere.)	Y	-	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (Units in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost	-	-	_	131.400	-	131.400	-	-	-	-	-	561.783

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Description:

(Units in Millions)

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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^{##} The FY 2014 OCO Request will be submitted at a later date

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: MD73 - Aegis Ashore Phase III

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 Sche	Item Schedule			rior Yea	rs		FY 2012	!		FY 2013		FY	2014 Ba	se	F١	2014 O	CO	FY	2014 To	tal
Item Nomenclature*	Exhibits	ID CD	Unit Cost (\$ M)	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
Aegis Ashore Poland, Equipment and Deckhouse	P5	Α	-	-	-	-	-	-	-	-	-	131.400	1	131.400	-	-	-	131.400	1	131.400
Total Gross/Weapon System Cost					-			-			-			131.400			-			131.400
Item Sche	dule			FY 2015			FY 2016	;		FY 2017			FY 2018		To	Comple	ete		Total	
Item Nomenclature*	Exhibits	CD	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost									
Aegis Ashore Poland, Equipment and Deckhouse	P5	Α	-	-	256.325	-	-	38.574	-	-	63.884	-	-	71.600	-	-	-	561.783	1	561.783
Total Gross/Weapon System Cost					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 P48 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

								UN	CLAS	SIFIED									
Exhibit P-5, Cost	Ar	nalysis:	PB 2014	Missile	Defense	Agency									Date: A	pril 2013			
Appropriation / E 0300D: Procurem Equipment / BSA Agency	ent	, Defens	e-Wide /	BA 01:	Major	•	MDAF 362	P/MAIS C				menclatu nore Phase			Name, L	shore Po	•		
Resource S	Sun	nmary	-	Prior ears	FY 2012	2 FY 20		Y 2014 Base	FY 20		2014 otal	FY 2015	FY 20)16 F	Y 2017	FY 201	To 8 Com		Total
Procurement Quantity (Ur	nits in	Each)		-	-		-	1		-	1	-		-	-			-	1
Gross/Weapon System C	ost (\$ in Millions)		-	-			131.400		-	131.400	256.325	3	8.574	63.884	71.6	600	-	561.783
Less PY Advance Procur	emei	nt (\$ in Million	s)	-	-		-	-		-	-	-		-	-			-	-
Net Procurement (P1) (\$ i	n Mill	ions)		-	-		-	131.400		-	131.400	256.325	3	8.574	63.884	71.6	600	-	561.783
Plus CY Advance Procure	emer	nt (\$ in Millions	s)	-	-		-	_		-	-	-		-	-			-	-
Total Obligation Author	ity (\$	in Millions)	<u>, </u>	-	-		-	131.400		-	131.400	256.325	3	8.574	63.884	71.6	600	-	561.783
			(Th	e following	Resource Su	ımmary row	s are for in	formational p	ourposes o	only. The corre	esponding b	oudget request	ts are docu	mented els	sewhere.)		·	\ <u> </u>	
Initial Spares (\$ in Millions)				-	-		-	_		-	-	-		-	-			-	_
Gross/Weapon System U	nit C	ost		-	-		-	131.400		-	131.400	-		-	-		-	-	561.783
# FY 2013 Program is fi ## The FY 2014 OCO F	om t	he FY 2013	President's	Budget, sul	bmitted Febr	uary 2012	,		1	1	1			,	'		1		
			Prior Yea			FY 2012			FY 201	3	F	Y 2014 Bas	e	F	Y 2014 O	co	F'	Y 2014 To	tal
Cost Elements († indicates the presence of a P-5A)	ID CD	Unit Cost	Quantity (Each)	Total Cost	Unit Cost	Quantity (Each)	Total Cost	Unit Cost	Quantity (Each)	Total y Cost	Unit Cost	Quantity (Each)	Total Cost	Unit Cost	Quantity	Total Cost	Unit Cost	Quantity (Each)	Total Cost
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
Total Recurring Cost				0.000			-			-			131.400			-			131.400
Total Flyaway Cost				0.000			-			-			131.400			-			131.400
Gross Weapon System Cost				-			-			-			131.400			-			131.400
			FY 2015			FY 2016			FY 201	7		FY 2018		1	To Comple	ete		Total Cos	t
Cost Elements († indicates the	ID	Unit Cost	Quantity	Total Cost	Unit Cost	Quantity	Total Cost	Unit Cost			Unit Cost	Quantity	Total Cost	Unit Cost	Quantity	Total Cost	Unit Cost	Quantity	Total Cost
presence of a P-5A)	CD	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)
Flyaway Cost Recurring Cost	\vdash																		
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
Total Recurring Cost				256.325			38.574	1		63.884	1		71.600			_			561.783
							00.07			00.007			71.000						

LI MD73 - Aegis Ashore Phase III Missile Defense Agency UNCLASSIFIED
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P-1 Line #28

Exhibit P-5, Cost Analysis: 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: MD73 - Aegis Ashore Phase III	Name, DODIC):	ure (Item Number - Item
FV 2045 FV 2046	EV 20	47 EV 0040	To Commiste	Total Coot

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

P-5 Remarks:

N/A

Exhibit P-40, Budget Item Justification Sheet: PB 2014 Missile Defense Agency

Date: April 2013

To

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major Equipment / BSA 17: Major

Equipment, Missile Defense Agency

Prior

MD77 - Radar Spares

FY 2014

P-1 Line Item Nomenclature:

ID Code (A=Service Ready, B=Not Service Ready) : B

Program Elements for Code B Items: 0603884C

FY 2014

Other Related Program Elements: 0603884C

MDAP/MAIS Code(s):

Resource Summary	Years	FY 2012	FY 2013"	Base	OCO""	Total	FY 2015	FY 2016	FY 2017	FY 2018	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	10.177	-	-		-	-	-	-	-	10.177
	(The following	g Resource Sum	mary rows are for	informational p	ourposes only. Th	e correspondin	g budget request	s are documente	ed elsewhere.)			
Initial Spares (\$ in Millions)	-	-	10.177	-	-	-	-	-	-	-	-	10.177
Flyaway Unit Cost (Units in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Description:

(Units in Millions)

Gross/Weapon System Unit Cost

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

Item Sche	dule		P	rior Year	's		FY 2012			FY 2013		FY	′ 2014 Ba	ase	F۱	/ 2014 O	co	FY	2014 To	otal
Item Nomenclature*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost															
Initial Spares	P18		-	-	0.000	-	-	-	-	-	10.177	-	-	-	-	-	-	-	-	-
Total Gross/Weapon System Cost					-			-			10.177			-			-			-
Ham Calaa		\neg					E)/ 00/0			-> / /-			->//-							
Item Sche	dule			FY 2015			FY 2016			FY 2017			FY 2018		To	o Comple	ete		Total	
Item Scne	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost		Qty (Each)	Total Cost		Qty (Each)	Total Cost		Qty (Each)		Unit Cost	Qty (Each)	Total Cost
			Unit Cost	Qty	Total Cost		Qty	Total Cost	Unit Cost	Qty		Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost		Qty	

*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.

LI MD77 - Radar Spares Missile Defense Agency UNCLASSIFIED
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P-1 Line #29

^{***} The FY 2014 OCO Request will be submitted at a later date

	0.1.0	7 (OOII 12B	
Exhibit P-40, Budget Item Justification Sheet: PB 20	14 Missile Defense Agency	,	Date: April 2013
Appropriation / Budget Activity / Budget Sub Activit 0300D: Procurement, Defense-Wide / BA 01: Major Equ Equipment, Missile Defense Agency	ipment / BSA 17: Major	P-1 Line Item Nome MD77 - Radar Spare	
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):			
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.			

LI MD77 - Radar Spares Missile Defense Agency UNCLASSIFIED Page 2 of 3

P-1 Line #29

Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major

Equipment / BSA 17: Major Equipment, Missile Defense

P-1 Line Item Nomenclature:

MD77 - Radar Spares

Item Nomenclature (Name):

Initial Spares

Agency

0												
P1 Line Number, End Item Line Item Number and Name, MDAP/MAIS	Prior Years	FY 2012 (\$ M)	FY 2013 (\$ M)	FY 2014 Base (\$ M)	FY 2014 OCO (\$ M)	FY 2014 Total (\$ M)	FY 2015 (\$ M)	FY 2016 (\$ M)	FY 2017 (\$ M)	FY 2018 (\$ M)	To Complete (\$ M)	Total (\$ M)
Initial												
BA 01 - Major Equipment												
1 - Initial Spares	0.000	-	10.177	-	-	-	-	-	-	-	-	10.177
Initial Subtotal	0.000	-	10.177	-	-	-	-	-	-	-	-	10.177
Total Cost (Initial + Replenishment)	0.000	-	10.177	-	-	-	-	-	-	-	-	10.177

P-18 Remarks:

Procure initial spares for one AN/TPY-2 BMDS radar.



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

MD83 - Iron Dome

P-1 Line Item Nomenclature:

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):

	Prior			FY 2014	FY 2014	FY 2014					То	
Resource Summary	Years	FY 2012	FY 2013 [#]	Base	OCO##	Total	FY 2015	FY 2016	FY 2017	FY 2018	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	600.149
	(The following	g Resource Sum	nmary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (Units in Millions)	_	-	_	-	-	-	-	-	-	-	-	-

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
			1			1						

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Description:

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

Item Sche	dule		P	rior Yea	's		FY 2012			FY 2013		FY	2014 Ba	ise	FY	2014 O	co	FY	2014 To	tal
Item Nomenclature*	Exhibits	ID CD	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost												
Iron Dome	P5	Α	203.868	1	203.868	-	-	-	-	-	-	220.309	1	220.309	-	-	-	220.309	1	220.309
Total Gross/Weapon System Cost					203.868			-			-			220.309			-			220.309
Item Sche	dule			FY 2015			FY 2016			FY 2017			FY 2018		To	Comple	te		Total	
Item Sche	dule	ID	Unit Cost	Qty (Each)	Total Cost		Qty (Each)	Total Cost	Unit Cost	Total Qty (Each)	Total Cost									
			Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty		Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost		Qty	

*Item Nomenclature represents Item Number, DODIC, and Item Name for the P40A and P5; Name for the P48 and P23; Modification Number and Modification Title for the P3A; Item Number and Item Name for the P10.

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^{##} The FY 2014 OCO Request will be submitted at a later date

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Exhibit P-40, Budget Item Justification Sheet	: PB 2014 Missile Defense Agency	1	Date: April	2013
Appropriation / Budget Activity / Budget Sub 0300D: Procurement, Defense-Wide / BA 01: M Equipment, Missile Defense Agency	ajor Equipment / BSA 17: Major	P-1 Line Item Nome MD83 - Iron Dome	nclature:	
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B	Items:	Other Related Program Eleme	ents: 0603913C
MDAP/MAIS Code(s):				
Note: Totals in this Exhibit P-40 set may not be exact or add due to	ounding.			
Justification: FY 2014: Procurement for batteries of the Iron Dome wea	pon system.			
FY 2015: Continued procurement of batteries of the Iron I	Oome weapon system.			

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Exhibit P-5, Cost Analysis: PB 2014 Missile Defense Agency

Appropriation / Budget Activity / Budget Sub Activity:

0300D: Procurement, Defense-Wide / BA 01: Major
Equipment / BSA 17: Major Equipment, Missile Defense
Agency

Prior

Date: April 2013

Item Nomenclature (Item Number - Item Nomenclature: Name, DODIC):
Iron Dome

To

	Prior			FY 2014	FY 2014	FY 2014					То	
Resource Summary	Years	FY 2012	FY 2013 [#]	Base	OCO##	Total	FY 2015	FY 2016	FY 2017	FY 2018	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)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.868	-	-	220.309	-	220.309	175.972	-	-	-	-	600.149
	(The following	g Resource Sum	nmary rows are fo	or informational p	ourposes only. Ti	he corresponding	g budget request	s are document	ed elsewhere.)			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost	203.868	-	_	220.309	-	220.309	175.972	-	-	_	_	200.050

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

(Units in Millions)

11161 1 2014 0001	<i>voque</i>	JOE WIII DC JC	ibiliilleu al a	ialei uale															
		All Prior Years			FY 2012			FY 2013			FY 2014 Base			FY 2014 OCO			FY 2014 Total		
Cost Elements († indicates the presence of a P-5A)	ID CD	Ullit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
Hardware Cost											•				,				
Non Recurring Cost																			
Iron Dome	Α	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
Gross Weapon System Cost				203.868			-			-			220.309			-			220.309

	FY 2015			FY 2016			FY 2017			FY 2018			To Complete			Total Cost			
(T indicates the	ID CD	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)	Unit Cost	Quantity (Each)	Total Cost (\$ M)
Hardware Cost		,	,						,									,	
Non Recurring Cost																			
Iron Dome	Α	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
Gross Weapon System Cost				175.972			-			-			-			-			600.149

^{##} The FY 2014 OCO Request will be submitted at a later date

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

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