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**Department of Defense  
Fiscal Year (FY) 2013 President's Budget Submission**

February 2012



**Missile Defense Agency**

*Justification Book Volume 2b*

***Procurement, Defense-Wide***

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

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Missile Defense Agency • President's Budget Submission FY 2013 • Procurement

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## **Introduction & Explanation of Contents**

The Department of Defense FY2013 President's Budget RDT&E, 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 book as listed below.

### **Volume 2a**

- R-1 Comptroller Exhibit
- MDA FY 2013 Budget Estimate Overview
- MDA Appropriation Summary
- Acronyms
- Congressional Reporting Requirements
- Program Assessment Rating Tool (PART) Submission
- RDT&E Exhibits in BA-03, BA-04, and BA-06

### **Volume 2b**

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

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Defense-Wide  
 FY 2013 President's Budget  
 Exhibit P-1 FY 2013 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

26 Jan 2012

Appropriation: 0300D Procurement, Defense-Wide

| Line<br>No                              | Item Nomenclature    | Ident<br>Code | FY 2011<br>Actuals<br>Quantity | Cost      | FY 2012<br>Base<br>Quantity | Cost      | FY 2012<br>OCO<br>Quantity | Cost | FY 2012<br>Total<br>Quantity | Cost      | S<br>e<br>c |
|---|----------------------|---------------|--------------------------------|-----------|-----------------------------|-----------|----------------------------|------|------------------------------|-----------|-------------|
| Budget Activity 01: Major Equipment     |                      |               |                                |           |                             |           |                            |      |                              |           |             |
| -----                                   |                      |               |                                |           |                             |           |                            |      |                              |           |             |
| Major Equipment, Missile Defense Agency |                      |               |                                |           |                             |           |                            |      |                              |           |             |
| 30                                      | THAAD                | B             | 22                             | 583,629   | 42                          | 709,150   |                            |      | 42                           | 709,150   | U           |
| 31                                      | Aegis BMD            | B             | 26                             | 283,280   | 46                          | 565,393   |                            |      | 46                           | 565,393   | U           |
| 32                                      | BMDS AN/TPY-2 Radars | B             |                                |           | 2                           | 380,195   |                            |      | 2                            | 380,195   | U           |
| 33                                      | Radar Spares         | B             |                                |           |                             |           |                            |      |                              |           | U           |
| 34                                      | Iron Dome            | A             | 1                              | 203,868   |                             |           |                            |      |                              |           | U           |
| Total Major Equipment                   |                      |               |                                | 1,070,777 |                             | 1,654,738 |                            |      |                              | 1,654,738 |             |
| Total Procurement, Defense-Wide         |                      |               |                                | 1,070,777 |                             | 1,654,738 |                            |      |                              | 1,654,738 |             |

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Defense-Wide  
 FY 2013 President's Budget  
 Exhibit P-1 FY 2013 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

26 Jan 2012

Appropriation: 0300D Procurement, Defense-Wide

| Line<br>No                              | Item Nomenclature    | Ident<br>Code | FY 2013<br>Base<br>Quantity | Cost      | FY 2013<br>OCO<br>Quantity | Cost | FY 2013<br>Total<br>Quantity | Cost      | S<br>e<br>c |
|---|----------------------|---------------|-----------------------------|-----------|----------------------------|------|------------------------------|-----------|-------------|
| Budget Activity 01: Major Equipment     |                      |               |                             |           |                            |      |                              |           |             |
| Major Equipment, Missile Defense Agency |                      |               |                             |           |                            |      |                              |           |             |
| 30                                      | THAAD                | B             | 36                          | 460,728   |                            |      | 36                           | 460,728   | U           |
| 31                                      | Aegis BMD            | B             | 29                          | 389,626   |                            |      | 29                           | 389,626   | U           |
| 32                                      | BMDS AN/TPY-2 Radars | B             | 1                           | 217,244   |                            |      | 1                            | 217,244   | U           |
| 33                                      | Radar Spares         | B             |                             | 10,177    |                            |      |                              | 10,177    | U           |
| 34                                      | Iron Dome            | A             |                             |           |                            |      |                              |           | U           |
| Total Major Equipment                   |                      |               |                             | 1,077,775 |                            |      |                              | 1,077,775 |             |
| Total Procurement, Defense-Wide         |                      |               |                             | 1,077,775 |                            |      |                              | 1,077,775 |             |

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

*Appropriation 0300D: Procurement, Defense-Wide*

| Line # | BA | BSA | Line Item Number | Line Item Title           | Page           |
|--------|----|-----|------------------|---------------------------|----------------|
| 30     | 01 | 17  | MD07             | THAAD.....                | Volume 2b - 1  |
| 31     | 01 | 17  | MD09             | Aegis BMD.....            | Volume 2b - 9  |
| 32     | 01 | 17  | MD11             | BMDS AN/TPY-2 Radars..... | Volume 2b - 17 |
| 33     | 01 | 17  | MD77             | Radar Spares.....         | Volume 2b - 25 |
| 34     | 01 | 17  | MD83             | Iron Dome.....            | Volume 2b - 27 |

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

| <b>Line Item Title</b> | <b>Line Item Number</b> | <b>Line #</b> | <b>BA</b> | <b>BSA</b> | <b>Page</b>    |
|------------------------|-------------------------|---------------|-----------|------------|----------------|
| Aegis BMD              | MD09                    | 31            | 01        | 17.....    | Volume 2b - 9  |
| BMDS AN/TPY-2 Radars   | MD11                    | 32            | 01        | 17.....    | Volume 2b - 17 |
| Iron Dome              | MD83                    | 34            | 01        | 17.....    | Volume 2b - 27 |
| Radar Spares           | MD77                    | 33            | 01        | 17.....    | Volume 2b - 25 |
| THAAD                  | MD07                    | 30            | 01        | 17.....    | Volume 2b - 1  |

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# Fiscal Year 2013 Budget Estimates

## Missile Defense Agency (MDA)



February 2012

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MISSILE DEFENSE AGENCY

Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates

| <u>Appropriation Summary</u> | <u>FY 2011<br/>Actual</u> | <u>Price<br/>Change</u> | <u>Program<br/>Change</u> | <u>FY 2012<br/>Estimate</u> | <u>Price<br/>Change</u> | <u>Program<br/>Change</u> | <u>FY 2013<br/>Estimate</u> |
|------------------------------|---------------------------|-------------------------|---------------------------|-----------------------------|-------------------------|---------------------------|-----------------------------|
| O&M, Defense-Wide            | \$0                       | \$0                     | \$202.3                   | \$202.3                     | \$3.4                   | \$54.3                    | \$260.0                     |

**MISSILE DEFENSE AGENCY**

**Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

|  | <u>FY 2011<br/>Actual</u> | <u>FY 2012<br/>Estimate</u> | <u>FY 2013<br/>Estimate</u> |
|--|---------------------------|-----------------------------|-----------------------------|
| <b>1. Operational Support</b>                        | <b>0</b>                  | <b>202,342</b>              | <b>259,975</b>              |
| Aegis Ballistic Missile Defense (BMD)                | 0                         | 0                           | 12,163                      |
| Ballistic Missile Defense Systems (BMDS) Radar       | 0                         | 151,937                     | 192,133                     |
| Terminal High Altitude Area Defense (THAAD)          | 0                         | 50,405                      | 55,679                      |
| <b>Total Operation and Maintenance, Defense-Wide</b> | <b>0</b>                  | <b>202,342</b>              | <b>259,975</b>              |

MISSILE DEFENSE AGENCY

Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates

|  | <u>FY 2011<br/>Actual</u> | <u>FY 2012<br/>Estimate</u> | <u>FY 2013<br/>Estimate</u> |
|--|---------------------------|-----------------------------|-----------------------------|
| <b>1. Operational Support</b>                        | <b>0</b>                  | <b>202,342</b>              | <b>259,975</b>              |
| Aegis Ballistic Missile Defense (BMD)                | 0                         | 0                           | 12,163                      |
| Ballistic Missile Defense Systems (BMDS) Radar       | 0                         | 151,937                     | 192,133                     |
| Terminal High Altitude Area Defense (THAAD)          | 0                         | 50,405                      | 55,679                      |
| <b>Total Operation and Maintenance, Defense-Wide</b> | <b>0</b>                  | <b>202,342</b>              | <b>259,975</b>              |

# MISSILE DEFENSE AGENCY

## Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2013 Budget Estimates

|                                  | <u>FY 2011<br/>Program</u> | <u>Price<br/>Growth<br/>Percent</u> | <u>Price<br/>Growth</u> | <u>Program<br/>Growth</u> | <u>FY 2012<br/>Program</u> | <u>Price<br/>Growth<br/>Percent</u> | <u>Price<br/>Growth</u> | <u>Program<br/>Growth</u> | <u>FY 2013<br/>Program</u> |
|----------------------------------|----------------------------|-------------------------------------|-------------------------|---------------------------|----------------------------|-------------------------------------|-------------------------|---------------------------|----------------------------|
| <u>DWCF Purchases</u>            |                            |                                     |                         |                           |                            |                                     |                         |                           |                            |
| 679 Cost Reimbursable Purchase   | 0                          | 1.80%                               | 0                       | 0                         | 0                          | 1.70%                               | 0                       | 4,246                     | 4,246                      |
| <b>699 Total DWCF Purchases</b>  | <b>0</b>                   |                                     | <b>0</b>                | <b>0</b>                  | <b>0</b>                   |                                     | <b>0</b>                | <b>4,246</b>              | <b>4,246</b>               |
| <u>Other Purchases</u>           |                            |                                     |                         |                           |                            |                                     |                         |                           |                            |
| 922 Eqt Maint Contract           | 0                          | 1.80%                               | 0                       | 186,805                   | 186,805                    | 1.70%                               | 3,176                   | 41,467                    | 231,448                    |
| 930 Other Depot Maint non fund   | 0                          | 1.80%                               | 0                       | 0                         | 0                          | 1.70%                               | 0                       | 7,917                     | 7,917                      |
| 989 Other Services               | 0                          | 1.80%                               | 0                       | 15,537                    | 15,537                     | 1.70%                               | 264                     | 563                       | 16,364                     |
| <b>999 Total Other Purchases</b> | <b>0</b>                   |                                     | <b>0</b>                | <b>202,342</b>            | <b>202,342</b>             |                                     | <b>3,440</b>            | <b>49,947</b>             | <b>255,729</b>             |
| <b>Total</b>                     | <b>0</b>                   |                                     | <b>0</b>                | <b>202,342</b>            | <b>202,342</b>             |                                     | <b>3,440</b>            | <b>54,193</b>             | <b>259,975</b>             |

# MISSILE DEFENSE AGENCY

## Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2013 Budget Estimates

|                                  | <u>FY 2011<br/>Program</u> | <u>Price<br/>Growth<br/>Percent</u> | <u>Price<br/>Growth</u> | <u>Program<br/>Growth</u> | <u>FY 2012<br/>Program</u> | <u>Price<br/>Growth<br/>Percent</u> | <u>Price<br/>Growth</u> | <u>Program<br/>Growth</u> | <u>FY 2013<br/>Program</u> |
|----------------------------------|----------------------------|-------------------------------------|-------------------------|---------------------------|----------------------------|-------------------------------------|-------------------------|---------------------------|----------------------------|
| <u>DWCF Purchases</u>            |                            |                                     |                         |                           |                            |                                     |                         |                           |                            |
| 679 Cost Reimbursable Purchase   | 0                          | 1.80%                               | 0                       | 0                         | 0                          | 1.70%                               | 0                       | 4,246                     | 4,246                      |
| <b>699 Total DWCF Purchases</b>  | <b>0</b>                   |                                     | <b>0</b>                | <b>0</b>                  | <b>0</b>                   |                                     | <b>0</b>                | <b>4,246</b>              | <b>4,246</b>               |
| <u>Other Purchases</u>           |                            |                                     |                         |                           |                            |                                     |                         |                           |                            |
| 922 Eqt Maint Contract           | 0                          | 1.80%                               | 0                       | 186,805                   | 186,805                    | 1.70%                               | 3,176                   | 41,467                    | 231,448                    |
| 930 Other Depot Maint non fund   | 0                          | 1.80%                               | 0                       | 0                         | 0                          | 1.70%                               | 0                       | 7,917                     | 7,917                      |
| 989 Other Services               | 0                          | 1.80%                               | 0                       | 15,537                    | 15,537                     | 1.70%                               | 264                     | 563                       | 16,364                     |
| <b>999 Total Other Purchases</b> | <b>0</b>                   |                                     | <b>0</b>                | <b>202,342</b>            | <b>202,342</b>             |                                     | <b>3,440</b>            | <b>49,947</b>             | <b>255,729</b>             |
| <b>Total</b>                     | <b>0</b>                   |                                     | <b>0</b>                | <b>202,342</b>            | <b>202,342</b>             |                                     | <b>3,440</b>            | <b>54,193</b>             | <b>259,975</b>             |

MISSILE DEFENSE AGENCY

Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates

|                         | <u>FY 2011</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>Change</u><br><u>FY 2012/2013</u> |
|-------------------------|----------------|----------------|----------------|--------------------------------------|
| Contractor FTEs (Total) | 0              | 473            | 605            | 132                                  |



**MISSILE DEFENSE AGENCY**

**Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

|   | <u><b>TOTAL</b></u> |
|---|---------------------|
| <b>FY 2012 President's Budget Request (Amended, if applicable)</b>  | <b>202,758</b>      |
| 1. Congressional Adjustments  |                     |
| a. Distributed Adjustments  |                     |
| b. Undistributed Adjustments  |                     |
| 1) Unobligated Balances Congress Adjustments  | -336                |
| c. Adjustments to Meet Congressional Intent   |                     |
| d. General Provisions   |                     |
| 1) Sec 8034 - Mitigation of Environment Impacts   | -80                 |
| <b>FY 2012 Appropriated Amount</b>  | <b>202,342</b>      |
| 2. War-Related and Disaster Supplemental Appropriations   |                     |
| 3. Fact-of-Life Changes   |                     |
| <b>FY 2012 Baseline Funding</b>   | <b>202,342</b>      |
| 4. Reprogrammings (Requiring 1415 Actions)  |                     |
| <b>Revised FY 2012 Estimate</b>   | <b>202,342</b>      |
| 5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings  |                     |
| <b>FY 2012 Normalized Current Estimate</b>  | <b>202,342</b>      |
| 6. Price Change   | 3,440               |
| 7. Functional Transfers   |                     |
| a. Transfers In   |                     |
| 1) Transfers in from RDT&E for Aegis Ballistic Missile Defense Systems (BMD) Replacement training due to growth in total number of Battery personnel. | 12,163              |
| 2) Transfers in from RDT&E for Terminal High Altitude Area Defense (THAAD) Battery sustainment and  | 4,585               |

**MISSILE DEFENSE AGENCY**

**Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

|  | <u><b>TOTAL</b></u> |
|--|---------------------|
| maintenance due to start of hardware deliveries for Battery #3.  |                     |
| 8. Program Increases   |                     |
| a. Annualization of New FY 2012 Program  |                     |
| b. One-Time FY 2013 Increases  |                     |
| c. Program Growth in FY 2013   |                     |
| 1) BMDS Sensors Program Growth is due to increased cost to operate and sustain deployed AN/TPY-2 Radars, and operate and sustain all Upgraded Early Warning Radars | 37,445              |
| 9. Program Decreases   |                     |
| a. Annualization of FY 2012 Program Decreases  |                     |
| b. One-Time FY 2012 Increases  |                     |
| c. Program Decreases in FY 2013  |                     |
| <b>FY 2013 Budget Request</b>  | <b>259,975</b>      |

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

Operation and Maintenance, Defense-Wide Summary (\$ in thousands)

**Budget Activity (BA) 1: Operating Forces**

**Subactivity Group 11A**

|     |                |               |               |                 |               |               |                 |
|-----|----------------|---------------|---------------|-----------------|---------------|---------------|-----------------|
|     | FY 2011        | Price         | Program       | FY 2012         | Price         | Program       | FY 2013         |
|     | <u>Actuals</u> | <u>Change</u> | <u>Change</u> | <u>Estimate</u> | <u>Change</u> | <u>Change</u> | <u>Estimate</u> |
| MDA | 0              | 0             | 202,342       | 202,342         | 3,440         | 54,193        | 259,975         |

**I. Description of Operations Financed:**      A. Terminal High Altitude Area Defense (THAAD). Funding provides field and sustainment level maintenance for all MDA developed and deployed THAAD equipment. Funding 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 the inventory control and storage of repair parts, LRUs, and spares. Funds cover subject matter experts (SME) engineering support for the THAAD peculiar equipment and the THAAD Radar. These SMEs will be deployed to the THAAD location. Funds provide missile transportation and handling from the missile storage location to the site of the THAAD launchers. Additional tasks are to update the logistical data information of the Interactive Electronic Technical Manual (IETM) with the most current data and provide software user's guide updates and certify each revision of the software. Funds provide maintenance and upkeep for all THAAD training devices. This contractor logistics support contract provides support for the Ballistic Missile Defense System (BMDS) unique equipment and also provides for any replacement training required for replacement soldiers or due to design changes. These funds are required to ensure THAAD assets are properly maintained and the crews are trained and certified to meet Combatant Commanders needs.

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

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

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

Defense mission. The Air Force is responsible for the day to day operations and maintenance of the UEWRS and Cobra Dane Radar. The FY 2013 funding also provides for the daily operation and sustainment of eight Army Navy Transportable Radar Surveillance (AN/TPY-2) radars: four forward-based radars (OCNUS), three THAAD battery radars (1 US, 1 OCNUS, 1 TBD), and one radar at Pacific Missile Range Facility (PMRF/Wake Island).

C. Aegis Ballistic Missile Defense (BMD). At the end of FY 2013 there will be 92 SM-3 Blk IA's available for deployment aboard United States Navy BMD configured ships. 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 peculiar 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

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

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

battery. Interceptors are not considered part of battery force structure and are allocated by commanders in accordance with the mission and threat.

Batteries will be doctrinally assigned to the theater Army Air and Missile Defense Command. Engagements will be coordinated through the theater Air Operations Center. With the provision of specialized communications and radar software, the battery will be able to communicate directly with the Ballistic Missile Defense System Command and Control Battle Management and Communications (C2BMC) system making it capable of performing surveillance and tracking missions in addition to its normal active defense engagement mission.

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 2013 funding also provides for the daily operation and sustainment of eight AN/TPY-2 radars: four forward-based radars (OCONUS), three THAAD battery radars (1 U.S., 1 OCONUS, 1 TBD), and one radar at (PMRF/Wake Island). These services are furnished through Centralized Contractor Logistics Support (CCLS) contracts.

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

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

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

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.

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

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

|   | FY 2011<br>Actuals | Budget<br>Request | FY 2012              |         |              |         | Current<br>Estimate | FY 2013<br>Estimate |
|---|--------------------|-------------------|----------------------|---------|--------------|---------|---------------------|---------------------|
|   |                    |                   | Congressional Action |         |              |         |                     |                     |
|   |                    |                   | Amount               | Percent | Appropriated |         |                     |                     |
| A. BA Subactivities                               |                    |                   |                      |         |              |         |                     |                     |
| 1. Operational Support                            | 0                  | 202,758           | -416                 | -0.2    | 202,342      | 202,342 | 259,975             |                     |
| Aegis Ballistic Missile<br>Defense (BMD)          | 0                  | 0                 | 0                    | n/a     | 0            | 0       | 12,163              |                     |
| Ballistic Missile Defense<br>Systems (BMDS) Radar | 0                  | 151,937           | 0                    | 0.0     | 151,937      | 151,937 | 192,133             |                     |
| Terminal High Altitude Area<br>Defense (THAAD)    | 0                  | 50,821            | -416                 | -0.8    | 50,405       | 50,405  | 55,679              |                     |
| Total   | 0                  | 202,758           | -416                 | -0.2    | 202,342      | 202,342 | 259,975             |                     |

Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates

III. Financial Summary (\$ in thousands)

B. Reconciliation Summary

|  | Change<br>FY 2012/FY 2012 | Change<br>FY 2012/FY 2013 |
|--|---------------------------|---------------------------|
| <b>Baseline Funding</b>                        | <b>202,758</b>            | <b>202,342</b>            |
| Congressional Adjustments (Distributed)        |                           |                           |
| Congressional Adjustments (Undistributed)      | -336                      |                           |
| Adjustments to Meet Congressional Intent       |                           |                           |
| Congressional Adjustments (General Provisions) | -80                       |                           |
| <b>Subtotal Appropriated Amount</b>            | <b>202,342</b>            |                           |
| Fact-of-Life Changes (2012 to 2012 Only)       |                           |                           |
| <b>Subtotal Baseline Funding</b>               | <b>202,342</b>            |                           |
| Supplemental                                   |                           |                           |
| Reprogrammings                                 |                           |                           |
| Price Changes                                  |                           | 3,440                     |
| Functional Transfers                           |                           | 16,748                    |
| Program Changes                                |                           | 37,445                    |
| <b>Current Estimate</b>                        | <b>202,342</b>            | <b>259,975</b>            |
| Less: Wartime Supplemental                     |                           |                           |
| <b>Normalized Current Estimate</b>             | <b>202,342</b>            |                           |



**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

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

|   | <b>Amount</b> | <b>Totals</b>  |
|---|---------------|----------------|
| <b>C. Reconciliation of Increases and Decreases</b>   |               |                |
| <b>FY 2012 President's Budget Request (Amended, if applicable)</b>  |               | <b>202,758</b> |
| 1. Congressional Adjustments  |               | -416           |
| a. Distributed Adjustments  |               |                |
| b. Undistributed Adjustments  |               |                |
| 1) Unobligated Balances Congress Adjustments  | -336          |                |
| c. Adjustments to Meet Congressional Intent   |               |                |
| d. General Provisions   |               |                |
| 1) Sec 8034 - Mitigation of Environment Impacts   | -80           |                |
| <b>FY 2012 Appropriated Amount</b>  |               | <b>202,342</b> |
| 2. War-Related and Disaster Supplemental Appropriations   |               |                |
| 3. Fact-of-Life Changes   |               |                |
| <b>FY 2012 Baseline Funding</b>   |               | <b>202,342</b> |
| 4. Reprogrammings (Requiring 1415 Actions)  |               |                |
| <b>Revised FY 2012 Estimate</b>   |               | <b>202,342</b> |
| 5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings  |               |                |
| <b>FY 2012 Normalized Current Estimate</b>  |               | <b>202,342</b> |
| 6. Price Change   |               | 3,440          |
| 7. Functional Transfers   |               | 16,748         |
| a. Transfers In   |               |                |
| 1) Transfers in from RDT&E for Aegis Ballistic Missile Defense Systems (BMD) Replacement training due to growth in total number of Battery personnel.<br>(FY 2012 Baseline \$0)                   | 12,163        |                |
| 2) Transfers in from RDT&E for Terminal High Altitude Area Defense (THAAD) Battery sustainment and maintenance due to start of hardware deliveries for Battery #3.<br>(FY 2012 Baseline \$50,405) | 4,585         |                |
| 8. Program Increases  |               | 37,445         |
| a. Annualization of New FY 2012 Program   |               |                |

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

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

| <b>C. Reconciliation of Increases and Decreases</b>   | <b>Amount</b> | <b>Totals</b>  |
|---|---------------|----------------|
| b. One-Time FY 2013 Increases   |               |                |
| c. Program Growth in FY 2013  |               |                |
| 1) BMDS Sensors Program Growth is due to increased cost to operate and sustain deployed AN/TPY-2 Radars, and operate and sustain all Upgraded Early Warning Radars (FY 2012 Baseline \$151,937) | 37,445        |                |
| 9. Program Decreases  |               |                |
| a. Annualization of FY 2012 Program Decreases   |               |                |
| b. One-Time FY 2012 Increases   |               |                |
| c. Program Decreases in FY 2013   |               |                |
| <b>FY 2013 Budget Request</b>   |               | <b>259,975</b> |

**Missile Defense Agency  
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**IV. Performance Criteria and Evaluation Summary:**

A. Terminal High Altitude Area Defense (THAAD). Performance objectives are defined in the contract as the following: the contractor will receive minimal fee by maintaining all THAAD peculiar equipment at a 70% operation rate, and a maximum fee by maintaining all THAAD peculiar equipment at a 95% operational rate with 90% as the lowest acceptable rate. Operational rate is based on the current number of pieces of THAAD equipment and not the operational readiness rate reported to the Department of the Army by the deployed THAAD unit.

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:

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

"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-

**Missile Defense Agency  
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**IV. Performance Criteria and Evaluation Summary:**

defined conditions that are outside the control of the Contractor and are exceptions to  $A_o$  downtime. For AN/TPY-2 radars, performance incentives are calculated as follows:

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

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

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

| <b>V. <u>Personnel Summary</u></b> | <b><u>FY 2011</u></b> | <b><u>FY 2012</u></b> | <b><u>FY 2013</u></b> | <b>Change<br/>FY 2011/<br/>FY 2012</b> | <b>Change<br/>FY 2012/<br/>FY 2013</b> |
|------------------------------------|-----------------------|-----------------------|-----------------------|--|--|
| <u>Contractor FTEs (Total)</u>     | <u>0</u>              | <u>473</u>            | <u>605</u>            | <u>473</u>                             | <u>132</u>                             |

Contractor logistics support FTEs based on current estimates. FY 2013 increase reflects transfer of Aegis Ballistic Missile Defense Systems (BMD) Standard Missile 3 Block IA, sustainment from RDT&E.

**Missile Defense Agency  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2013 Budget Estimates**

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

|                                  | FY 2011               | Change                        |                       | FY 2012                | Change                        |                       | FY 2013                |
|----------------------------------|-----------------------|-------------------------------|-----------------------|------------------------|-------------------------------|-----------------------|------------------------|
| <b>OP 32 Line</b>                | <b><u>Actuals</u></b> | <b><u>FY 2011/FY 2012</u></b> |                       | <b><u>Estimate</u></b> | <b><u>FY 2012/FY 2013</u></b> |                       | <b><u>Estimate</u></b> |
|                                  |                       | <b><u>Price</u></b>           | <b><u>Program</u></b> |                        | <b><u>Price</u></b>           | <b><u>Program</u></b> |                        |
| 679 Cost Reimbursable Purchase   | 0                     | 0                             | 0                     | 0                      | 0                             | 4,246                 | 4,246                  |
| <b>699 Total DWCF Purchases</b>  | <b>0</b>              | <b>0</b>                      | <b>0</b>              | <b>0</b>               | <b>0</b>                      | <b>4,246</b>          | <b>4,246</b>           |
| 922 Eqt Maint Contract           | 0                     | 0                             | 186,805               | 186,805                | 3,176                         | 41,467                | 231,448                |
| 930 Other Depot Maint non fund   | 0                     | 0                             | 0                     | 0                      | 0                             | 7,917                 | 7,917                  |
| 989 Other Services               | 0                     | 0                             | 15,537                | 15,537                 | 264                           | 563                   | 16,364                 |
| <b>999 Total Other Purchases</b> | <b>0</b>              | <b>0</b>                      | <b>202,342</b>        | <b>202,342</b>         | <b>3,440</b>                  | <b>49,947</b>         | <b>255,729</b>         |
| <b>Total</b>                     | <b>0</b>              | <b>0</b>                      | <b>202,342</b>        | <b>202,342</b>         | <b>3,440</b>                  | <b>54,193</b>         | <b>259,975</b>         |

# **Missile Defense Agency**

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**Fiscal Year 2013**

**Program and Budget Review**

**Military Construction Exhibit**



**February 2012**

**MISSILE DEFENSE AGENCY  
FY 2013 MILITARY CONSTRUCTION  
PROGRAM AND BUDGET REVIEW SUBMITTAL  
DESCRIPTIVE SUMMARIES**

(\$ in Thousands)

| <b><u>Program</u></b>       | <b><u>Authorization</u></b> | <b><u>Appropriation</u></b> |
|-----------------------------|-----------------------------|-----------------------------|
| Major Construction          | 183,800                     | 183,800                     |
| MILCON Planning & Design    | <u>4,548</u>                | <u>4,548</u>                |
| TOTAL MILITARY CONSTRUCTION | 188,348                     | 188,348                     |



**MISSILE DEFENSE AGENCY  
FY 2013 MILITARY CONSTRUCTION  
PROJECT SUMMARY  
BY LOCATION**

(\$ in Thousands)

| <u>State/Country/Installation/Project</u>  | <u>Total<br/>Cost</u> | <u>This<br/>Request</u> | <u>New/Current<br/>Mission</u> |
|--|-----------------------|-------------------------|--------------------------------|
| <b>Major Construction</b>  |                       |                         |                                |
| <b>New York</b>  |                       |                         |                                |
| Fort Drum<br>In-Flight Interceptor Communication<br>System Data Terminal Complex | 25,900                | 25,900                  | New                            |
| <b>Romania</b>   |                       |                         |                                |
| Deveselu<br>Aegis Ashore Missile Defense<br>System Complex                       | 157,900               | 157,900                 | New                            |
| <b>MILCON Planning and Design</b>  | 4,548                 | 4,548                   |                                |
| <b>TOTAL MILITARY CONSTRUCTION</b>   | 188,348               | 188,348                 |                                |

|  |  |  |          |          |          |                                      |          |                                 |                                    |          |
|--|--|--|----------|----------|----------|--------------------------------------|----------|---------------------------------|------------------------------------|----------|
| 1. COMPONENT<br>MDA  |  | FY 2013 MILITARY CONSTRUCTION PROJECT DATA                             |          |          |          |                                      |          | 2. DATE<br>Feb 2012             |                                    |          |
| 3. INSTALLATION AND LOCATION<br>Fort Drum, New York  |  |  |          |          |          | 4. COMMAND<br>Missile Defense Agency |          |                                 | 5. AREA CONSTR. COST INDEX<br>1.15 |          |
| 6. PERSONNEL<br><br>STRENGTH:<br>N/A: Tenant of U.S. Army  |  | PERMANENT  |          |          | STUDENTS |                                      |          | SUPPORTED                       |                                    |          |
|  |  | OFFICER  | ENLISTED | CIVILIAN | OFFICER  | ENLISTED                             | CIVILIAN | OFFICER                         | ENLISTED                           | CIVILIAN |
|  |  |  |          |          |          |                                      |          |                                 |                                    |          |
| 7. INVENTORY DATA (\$000)  |  |  |          |          |          |                                      |          |                                 |                                    |          |
| A. TOTAL ACERAGE ..... N/A<br>B. INVENTORY TOTAL AS OF ..... N/A<br>C. AUTHORIZATION NOT YET IN INVENTORY ..... 0<br>D. AUTHORIZATION REQUESTED IN THE FY2013 ..... 25,900<br>E. AUTHORIZATION REQUESTED IN THE FY2014 ..... 0<br>F. PLANNED IN NEXT THREE PROGRAM YEARS ..... 0<br>G. REMAINING DEFICIENCY ..... 0<br>H. GRAND TOTAL. .... 25,900 |  |  |          |          |          |                                      |          |                                 |                                    |          |
| 8. PROJECTS REQUESTED IN THE FY2013 PROGRAM:   |  |  |          |          |          |                                      |          |                                 |                                    |          |
| CATEGORY CODE  |  | PROJECT TITLE  |          | SCOPE    |          | COST (\$000)                         |          | DESIGN STATUS                   |                                    |          |
| 1312   |  | In-Flight Interceptor<br>Communication System Data<br>Terminal Complex |          | 8,500 SF |          | 25,900                               |          | START COMPLETE<br>Aug 11 Aug 12 |                                    |          |
| 9. FUTURE PROJECTS:  |  |  |          |          |          |                                      |          |                                 |                                    |          |
| CATEGORY CODE  |  | PROJECT TITLE  |          | SCOPE    |          | COST (\$000)                         |          |                                 |                                    |          |
|  |  |  |          |          |          |                                      |          |                                 |                                    |          |
| 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 Pollution:  |  |  |          |          |          | N/A                                  |          |                                 |                                    |          |
| B. Water pollution:  |  |  |          |          |          | N/A                                  |          |                                 |                                    |          |
| C. Occupational safety and health (OSH):   |  |  |          |          |          | N/A                                  |          |                                 |                                    |          |

|  |  |  |               |  |                     |                                   |
|--|--|--|---------------|--|---------------------|-----------------------------------|
| 1. COMPONENT<br>MDA  |  | FY 2013 MILITARY CONSTRUCTION PROJECT DATA |               |  | 2. DATE<br>Feb 2012 |                                   |
| 3. INSTALLATION AND LOCATION6<br>Fort Drum, New York   |  |  |               | 4. PROJECT TITLE<br>In-Flight Interceptor Communication System Data Terminal Complex |                     |                                   |
| 5. PROGRAM ELEMENT<br>0603882C   |  | 6. CATEGORY CODE<br>1312                   |               | 7. PROJECT NUMBER<br>MDA 639   |                     | 8. PROJECT COST (\$000)<br>25,900 |
| 9. COST ESTIMATES  |  |  |               |  |                     |                                   |
| ITEM   |  | U/M (M/E)                                  | QUANTITY      | UNIT COST  |                     | COST (\$000)                      |
| PRIMARY FACILITIES   |  |  |               |  |                     |                                   |
| Communications Data Terminal Building  |  | m2 (SF)                                    | 390.0 (4,200) | 32,469 (3,015)   |                     | 14,153 (12,663)                   |
| Technical Support Building   |  | m2 (SF)                                    | 372.0 (4,000) | 3,242 (302)  |                     | (1,206)                           |
| Security Forces Facility   |  | m2 (SF)                                    | 27.9 (300)    | 3,015 (280)  |                     | (84)                              |
| Standby Generator  |  | LS   | -             | -  |                     | (200)                             |
| SUPPORTING FACILITIES  |  |  |               |  |                     |                                   |
| Communication Support  |  | LM (LF)                                    | 1,951 (6,400) | 218 (66.3)   |                     | 9,008 (425)                       |
| Physical/Electronic Security Systems   |  | LS   | -             | -  |                     | (2,189)                           |
| HVAC, Electric Service   |  | LS   | -             | -  |                     | (1,887)                           |
| Water, Sewer, Gas  |  | LS   | -             | -  |                     | (1,168)                           |
| Paving, Walks, Curbs and Gutters   |  | LS   | -             | -  |                     | (1,206)                           |
| Other (Mob/Demob)  |  | LS   | -             | -  |                     | (1,183)                           |
| Site Imp (950)/Demo (0)  |  | LS   | -             | -  |                     | (950)                             |
| SUBTOTAL   |  |  |               |  |                     | 23,161                            |
| CONTINGENCY (5%)   |  |  |               |  |                     | 1,158                             |
| TOTAL CONTRACT COST  |  |  |               |  |                     | 24,319                            |
| SIOH (6.5%)  |  |  |               |  |                     | 1,581                             |
| TOTAL REQUEST  |  |  |               |  |                     | 25,900                            |
| TOTAL REQUEST ROUNDED  |  |  |               |  |                     | 25,900                            |
| INSTALLED EQUIPMENT-OTHER APPROP   |  |  |               |  |                     | (28,500)                          |
| 10. DESCRIPTION OF PROPOSED CONSTRUCTION: Construct an In-Flight Interceptor Communication System Data Terminal (IDT) complex that consists of a reinforced concrete building in which to house IDT transmitter/receiver equipment, communication antenna with inflated protective radome, uninterruptable power supply, and a 170KW standby generator. This project also constructs a specially fabricated technical support building, security lighting, fiber optic termination point, and a security forces facility. This is an operational facility that includes shielding against the effects of High-Altitude Electro Magnetic Pulse. Supporting facilities include electric power; utilities; communication ducts; physical and electronic security systems; lighting and security fencing to meet antiterrorism/force protection requirements; site improvements and storm drainage; and pavements, roads, curbs and gutters. Access for the handicapped will be provided. Air Conditioning: estimated 9 Tons |  |  |               |  |                     |                                   |
| 11. REQUIRED: 8,500 SF                      ADEQUATE: NONE                      SUBSTANDARD: NONE<br>PROJECT: Construct an In-Flight Interceptor Communication Building (IDT) and supporting facilities at Ft. Drum, New York (New Mission)<br><br>REQUIREMENT: This project is required to provide capability enhancements designed to support Missile Defense Agency's Phased Adaptive Approach to developing an enhanced homeland defense capability by 2015. An IDT is required in the eastern portion of the U.S. to communicate with Ground Based Interceptors from Fort Greely or Vandenberg AFB later in flight as they defend the East Coast of the U.S.<br><br>CURRENT SITUATION: There are currently no data terminals in the eastern U.S. that can provide ballistic missile defense system communications to meet the Missile Defense Agency's planned enhanced homeland defense against limited attack by 2015.  |  |  |               |  |                     |                                   |

| <b>1. COMPONENT</b><br>MDA  | <b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b> | <b>2. DATE</b><br>Feb 2012                          |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
|---|---|---|--------------------------|----------|--|-----|-------------------------------|----------|---------------------------|----------|---|-----|------------------------------|------------------|-----------------------------------|-----|---|-----------------|---|-------|-----------------------------|-----|------------------------|-------|--------------|-------|--------------|-----|----------------------------------|-----------------------------------|---|------------------------|-------------------------|-------|---------------|--------|---------------|-------|------------|-------|--------------------|-------|------|--------------|--|--|--|--------|
| <b>3. INSTALLATION AND LOCATION</b><br>Fort Drum, New York  |   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| <b>4. PROJECT TITLE :</b> In-Flight Interceptor Communication System Data Terminal Complex  |   | <b>5. PROJECT NUMBER</b><br>MDA 639                 |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| <p><u>IMPACT IF NOT PROVIDED:</u> If this project is not provided, planned enhancements of the Missile Defense Agency's homeland missile defense capability will not be available for NORTHCOM's defensive operations in 2015. Communication with ground based interceptors launched from Ft. Greely or Vandenberg AFB will not have critical course correction communications later in flight as they defend the East Coast of the U.S.</p> <p><u>ADDITIONAL INFORMATION:</u> Cost estimates are based on parametric estimates and similar experience gained during the construction of communication data terminals at Fort Greely, Alaska. This project is being coordinated with the installation's physical security plans and required physical security and/or combating terrorism measures are being included. The appropriate environmental analysis and documentation is being coordinated with the host installation and will be completed before construction.</p>  |   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| <b>12. SUPPLEMENTAL DATA:</b> <div style="margin-left: 20px;"> <p>A. Estimated Design Data</p> <div style="margin-left: 20px;"> <p>(1) Status</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">(a) Date Design Started:</td> <td>Aug 2011</td> </tr> <tr> <td>(b) Percent complete as of January 2012:</td> <td>55%</td> </tr> <tr> <td>(c) Date 35% Design Complete:</td> <td>Nov 2011</td> </tr> <tr> <td>(d) Date Design Complete:</td> <td>Aug 2012</td> </tr> <tr> <td>(e) Parametric Cost Estimating Used to Develop Costs:</td> <td>Yes</td> </tr> <tr> <td>(f) Type of Design Contract:</td> <td>Design-Bid-Build</td> </tr> </table> <p>(2) Basis</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">(a) Standard or Repetitive Design</td> <td>Yes</td> </tr> <tr> <td>(b) Where Design Was Most Recently Used</td> <td>Fort Greely, AK</td> </tr> </table> <p>(3) Total Design Cost (c) = (a)+(b) or (d)+(e) (\$000)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">(a) Production of Plans and Specifications:</td> <td>1,009</td> </tr> <tr> <td>(b) All Other Design Costs:</td> <td>791</td> </tr> <tr> <td>(c) Total Design Costs</td> <td>1,800</td> </tr> <tr> <td>(d) Contract</td> <td>1,540</td> </tr> <tr> <td>(e) In-house</td> <td>260</td> </tr> </table> <p>(4) Construction Contract Award Jan 2013</p> <p>(5) Construction Start Feb 2013</p> <p>(6) Construction Complete Oct 2014</p> </div> <p>B. Equipment associated with this project to be provided from other appropriations:</p> <table style="width: 100%; border: none; margin-top: 10px;"> <thead> <tr> <th style="text-align: left; width: 30%;">Equipment<br/><u>Nomenclature</u></th> <th style="text-align: left; width: 20%;">Procuring<br/><u>Appropriation</u></th> <th style="text-align: left; width: 20%;">Fiscal Year<br/><u>Appropriated<br/>Or Requested</u></th> <th style="text-align: left; width: 30%;">Cost<br/><u>(\$000)</u></th> </tr> </thead> <tbody> <tr> <td>Data Terminal Equipment</td> <td>RDT&amp;E</td> <td>FY12/13/14/15</td> <td>22,200</td> </tr> <tr> <td>LHC Equipment</td> <td>RDT&amp;E</td> <td>FY12/13/14</td> <td>4,900</td> </tr> <tr> <td>Security Equipment</td> <td>RDT&amp;E</td> <td>FY13</td> <td><u>1,400</u></td> </tr> <tr> <td></td> <td></td> <td></td> <td>28,500</td> </tr> </tbody> </table> </div> |   |   | (a) Date Design Started: | Aug 2011 | (b) Percent complete as of January 2012: | 55% | (c) Date 35% Design Complete: | Nov 2011 | (d) Date Design Complete: | Aug 2012 | (e) Parametric Cost Estimating Used to Develop Costs: | Yes | (f) Type of Design Contract: | Design-Bid-Build | (a) Standard or Repetitive Design | Yes | (b) Where Design Was Most Recently Used | Fort Greely, AK | (a) Production of Plans and Specifications: | 1,009 | (b) All Other Design Costs: | 791 | (c) Total Design Costs | 1,800 | (d) Contract | 1,540 | (e) In-house | 260 | Equipment<br><u>Nomenclature</u> | Procuring<br><u>Appropriation</u> | Fiscal Year<br><u>Appropriated<br/>Or Requested</u> | Cost<br><u>(\$000)</u> | Data Terminal Equipment | RDT&E | FY12/13/14/15 | 22,200 | LHC Equipment | RDT&E | FY12/13/14 | 4,900 | Security Equipment | RDT&E | FY13 | <u>1,400</u> |  |  |  | 28,500 |
| (a) Date Design Started:  | Aug 2011  |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (b) Percent complete as of January 2012:  | 55%   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (c) Date 35% Design Complete:   | Nov 2011  |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (d) Date Design Complete:   | Aug 2012  |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (e) Parametric Cost Estimating Used to Develop Costs:   | Yes   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (f) Type of Design Contract:  | Design-Bid-Build                                  |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (a) Standard or Repetitive Design   | Yes   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (b) Where Design Was Most Recently Used   | Fort Greely, AK                                   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (a) Production of Plans and Specifications:   | 1,009   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (b) All Other Design Costs:   | 791   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (c) Total Design Costs  | 1,800   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (d) Contract  | 1,540   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| (e) In-house  | 260   |   |                          |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| Equipment<br><u>Nomenclature</u>  | Procuring<br><u>Appropriation</u>                 | Fiscal Year<br><u>Appropriated<br/>Or Requested</u> | Cost<br><u>(\$000)</u>   |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| Data Terminal Equipment   | RDT&E   | FY12/13/14/15                                       | 22,200                   |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| LHC Equipment   | RDT&E   | FY12/13/14  | 4,900                    |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
| Security Equipment  | RDT&E   | FY13  | <u>1,400</u>             |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |
|   |   |   | 28,500                   |          |  |     |                               |          |                           |          |   |     |                              |                  |                                   |     |   |                 |   |       |                             |     |                        |       |              |       |              |     |                                  |                                   |   |                        |                         |       |               |        |               |       |            |       |                    |       |      |              |  |  |  |        |

|   |  |   |          |          |   |              |          |   |          |          |       |
|---|--|---|----------|----------|---|--------------|----------|---|----------|----------|-------|
| <b>1. COMPONENT</b><br>MDA  |  | <b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b> |          |          |   |              |          | <b>2. DATE</b><br>Feb 2012                |          |          |       |
| <b>3. INSTALLATION AND LOCATION</b><br>Deveselu, Romania  |  |   |          |          | <b>4. COMMAND</b><br>Missile Defense Agency |              |          | <b>5. AREA CONSTR. COST INDEX</b><br>0.99 |          |          |       |
| <b>6. PERSONNEL</b>   |  | <b>PERMANENT</b>                                  |          |          | <b>STUDENTS</b>                             |              |          | <b>SUPPORTED</b>                          |          |          |       |
| STRENGTH:   |  | OFFICER   | ENLISTED | CIVILIAN | OFFICER                                     | ENLISTED     | CIVILIAN | OFFICER                                   | ENLISTED | CIVILIAN | TOTAL |
| N/A: Tenant of U.S. Navy  |  |   |          |          |   |              |          |   |          |          |       |
| <b>7. INVENTORY DATA (\$000)</b>  |  |   |          |          |   |              |          |   |          |          |       |
| A. TOTAL ACERAGE ..... N/A  |  |   |          |          |   |              |          |   |          |          |       |
| B. INVENTORY TOTAL AS OF ..... N/A  |  |   |          |          |   |              |          |   |          |          |       |
| C. AUTHORIZATION NOT YET IN INVENTORY ..... 0   |  |   |          |          |   |              |          |   |          |          |       |
| D. AUTHORIZATION REQUESTED IN THE FY2013 ..... 157,900  |  |   |          |          |   |              |          |   |          |          |       |
| E. AUTHORIZATION REQUESTED IN THE FY2014 ..... 0  |  |   |          |          |   |              |          |   |          |          |       |
| F. PLANNED IN NEXT THREE PROGRAM YEARS ..... 0  |  |   |          |          |   |              |          |   |          |          |       |
| G. REMAINING DEFICIENCY ..... 0   |  |   |          |          |   |              |          |   |          |          |       |
| H. GRAND TOTAL. .... 157,900  |  |   |          |          |   |              |          |   |          |          |       |
| <b>8. PROJECTS REQUESTED IN THE FY2005 PROGRAM:</b>   |  |   |          |          |   |              |          |   |          |          |       |
| CATEGORY  |  | PROJECT TITLE                                     |          | SCOPE    |   | COST (\$000) |          | DESIGN STATUS                             |          |          |       |
| CODE  |  |   |          |          |   |              |          | START                                     |          | COMPLETE |       |
| 1456  |  | Aegis Ashore Missile Defense System Complex       |          | 1 EA     |   | 157,900      |          | Sep 11                                    |          | Nov 12   |       |
| <b>9. FUTURE PROJECTS:</b>  |  |   |          |          |   |              |          |   |          |          |       |
| CATEGORY  |  | PROJECT TITLE                                     |          | SCOPE    |   | COST (\$000) |          |   |          |          |       |
| CODE  |  |   |          |          |   |              |          |   |          |          |       |
| <b>10. MISSION OR MAJOR FUNCTIONS:</b> The mission of the Missile Defense Agency is to develop and field an integrated, layered Ballistic Missile Defense System (BMDS) to defend the United States, our deployed forces, allies, and friends against all ranges of enemy ballistic missiles in all phases of flight. |  |   |          |          |   |              |          |   |          |          |       |
| <b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>   |  |   |          |          |   |              |          |   |          |          |       |
| A. Air Pollution:   |  |   |          |          |   | N/A          |          |   |          |          |       |
| B. Water pollution:   |  |   |          |          |   | N/A          |          |   |          |          |       |
| C. Occupational safety and health (OSH):  |  |   |          |          |   | N/A          |          |   |          |          |       |

|  |  |  |  |   |  |                                    |  |
|--|--|--|--|---|--|------------------------------------|--|
| 1. COMPONENT<br>MDA  |  | FY 2013 MILITARY CONSTRUCTION PROJECT DATA |  |   |  | 2. DATE<br>Feb 2012                |  |
| 3. INSTALLATION AND LOCATION<br>Deveselu, Romania  |  |  |  | 4. PROJECT TITLE<br>Aegis Ashore Missile Defense System Complex |  |                                    |  |
| 8. PROGRAM ELEMENT<br>0603892C   |  | 6. CATEGORY CODE<br>1456                   |  | 7. PROJECT NUMBER<br>MDA 630                                    |  | 8. PROJECT COST (\$000)<br>157,900 |  |
| 9. COST ESTIMATES  |  |  |  |   |  |                                    |  |
| ITEM   |  | U/M (M/E)                                  |  | QUANTITY  |  | UNIT COST                          |  |
| PRIMARY FACILITIES   |  |  |  |   |  | 109,889                            |  |
| Mark-41 Launch Area Infrastructure   |  | EA   |  | 5   |  | 179,600 (898)                      |  |
| HEMP Radar Deckhouse Support Building  |  | m2 (SF)                                    |  | 2,703 (29,100)  |  | 8,077 (750) (21,836)               |  |
| Radar Deckhouse Foundation   |  | m3 (CY)                                    |  | 268 (350)   |  | 1,588 (1214) (425)                 |  |
| Special Construction   |  | LS   |  |   |  | (865)                              |  |
| Installed Equipment  |  | LS   |  |   |  | (4,140)                            |  |
| HEMP Backup Power Infrastructure   |  | LS   |  |   |  | (49,275)                           |  |
| Non-HEMP Backup Power  |  | LS   |  |   |  | (1,440)                            |  |
| Missile Storage Facility   |  | m2 (SF)                                    |  | 111 (1,200)   |  | 2,863 (266) (319)                  |  |
| Communications Equipment Pad   |  | m2 (SF)                                    |  | 1,282 (13,800)  |  | 172 (16) (221)                     |  |
| Secure Warehouse   |  | m2 (SF)                                    |  | 242 (2,600)   |  | 1,550 (144) (374)                  |  |
| Fire Station   |  | m3 (SF)                                    |  | 585 (6,300)   |  | 3,358 (312) (1,966)                |  |
| Entry Control Facility   |  | m2 SF                                      |  | 418 (4,500)   |  | 1,851 (172) (774)                  |  |
| Central Security Control Facility  |  | m2 (SF)                                    |  | 734 (7,900)   |  | 3,380 (314) (2,481)                |  |
| Security Fence/Gates/Lighting/ESS  |  | LS   |  |   |  | (8,475)                            |  |
| Fuel System and Storage Facilities   |  | BL (GA)                                    |  | 3,170 (100,000)   |  | 1,640 (52) (5,200)                 |  |
| Temporary Facilities/Mob/Demob   |  | LS   |  |   |  | (11,200)                           |  |
| SUPPORTING FACILITIES  |  |  |  |   |  | 29,295                             |  |
| Site Electrical  |  | LS   |  |   |  | (500)                              |  |
| Non-HEMP distribution  |  | LS   |  |   |  | (5,000)                            |  |
| Power Distribution ductbank  |  | LS   |  |   |  | (10,280)                           |  |
| Water, Sewer, Gas  |  | LS   |  |   |  | (2,140)                            |  |
| Water Supply Building and Storage  |  | LS   |  |   |  | (3,500)                            |  |
| Site Improvement/Demo  |  | LS   |  |   |  | (3,875)                            |  |
| Pavements & Walks  |  | LS   |  |   |  | (2,400)                            |  |
| Information/Communication Systems  |  | LS   |  |   |  | (1,380)                            |  |
| Anti-terrorism/Force Protection  |  | LS   |  |   |  | (220)                              |  |
| SUBTOTAL   |  |  |  |   |  | 139,184                            |  |
| CONTINGENCY (5.00%)  |  |  |  |   |  | 6,959                              |  |
| TOTAL CONTRACT COST  |  |  |  |   |  | 146,143                            |  |
| SIOH (6.50%)   |  |  |  |   |  | 9,499                              |  |
| DBA Insurance Costs  |  |  |  |   |  | 2,239                              |  |
| TOTAL REQUEST  |  |  |  |   |  | 157,881                            |  |
| TOTAL ROUNDED REQUEST  |  |  |  |   |  | 157,900                            |  |
| INSTALLED EQUIPMENT-OTHER APPROP   |  |  |  |   |  | (375,335)                          |  |
| 10. DESCRIPTION OF PROPOSED CONSTRUCTION: This project constructs an Aegis Ashore Missile Defense System site in Romania. Facilities will utilize the Aegis shipboard weapon system; launcher, radar, and command and control components. The site will consist of five Mark-41 launcher foundations, aprons and crane pads; Radar Deskhouse 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; 100,000 gallon fire water storage tank and HEMP protected suppression pumps; central security control facility; entry control facility; electronic security system infrastructure; perimeter security fencing, gates and patrol road within the restricted area boundary. |  |  |  |   |  |                                    |  |



|  |   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
|--|---|-------------------------------------|-------------------------|----------|--|-----|------------------------------|----------|--------------------------|----------|---|-----|-----------------------------|------------------|-----------------------------------|-----|---|----------|--|-------|----------------------------|-------|------------------------|--------|--------------|--------|--------------|-------|
| <b>1. COMPONENT</b><br>MDA   | <b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b> | <b>2. DATE</b><br>Feb 2012          |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| <b>3. INSTALLATION AND LOCATION</b><br>Deveselu, Romania   |   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| <b>4. PROJECT TITLE</b><br>Aegis Ashore Missile Defense System Complex   |   | <b>5. PROJECT NUMBER</b><br>MDA 630 |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| <b>11. REQUIRED (cont) :</b><br><br>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 activities will be RDT&E funded.<br><br>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).<br><br>Parametric 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 15% 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 EO 12114, Environmental Effects Abroad of Major Federal Actions, will be completed prior to construction start.<br><br><div style="text-align: center;">           *-The RDTE 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.         </div>   |   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| <b>12. SUPPLEMENTAL DATA:</b><br><div style="margin-left: 20px;"> <b>A. Estimated Design Data</b><br/>           (1) Status:           <table style="width: 100%; margin-left: 20px;"> <tr><td>(a) Date Design Started</td><td style="text-align: right;">Sep 2011</td></tr> <tr><td>(b) Percent Complete As Of November 2011</td><td style="text-align: right;">15%</td></tr> <tr><td>(c) Date 35% Design Complete</td><td style="text-align: right;">Apr 2012</td></tr> <tr><td>(d) Date Design Complete</td><td style="text-align: right;">Nov 2012</td></tr> <tr><td>(e) Parametric Cost Estimating Used To Develop Cost</td><td style="text-align: right;">Yes</td></tr> <tr><td>(f) Type of Design Contract</td><td style="text-align: right;">Design-Bid-Build</td></tr> </table>           (2) Basis:           <table style="width: 100%; margin-left: 20px;"> <tr><td>(a) Standard or Repetitive Design</td><td style="text-align: right;">Yes</td></tr> <tr><td>(b) Where Design Was Most Recently Used</td><td style="text-align: right;">PMRF, HI</td></tr> </table>           (3) Total Design Cost (c) = (a)+(b) or (d)+(e) (\$000)           <table style="width: 100%; margin-left: 20px;"> <tr><td>(a) Production of Plans and Specifications</td><td style="text-align: right;">9,500</td></tr> <tr><td>(b) All Other Design Costs</td><td style="text-align: right;">6,300</td></tr> <tr><td>(c) Total Design Costs</td><td style="text-align: right;">15,800</td></tr> <tr><td>(d) Contract</td><td style="text-align: right;">11,060</td></tr> <tr><td>(e) In-House</td><td style="text-align: right;">4,740</td></tr> </table>           (4) Contract Award <span style="float: right;">Mar 2013</span><br/>           (5) Construction Start <span style="float: right;">Apr 2013</span><br/>           (6) Construction Completion <span style="float: right;">Mar 2015</span> </div> |   |                                     | (a) Date Design Started | Sep 2011 | (b) Percent Complete As Of November 2011 | 15% | (c) Date 35% Design Complete | Apr 2012 | (d) Date Design Complete | Nov 2012 | (e) Parametric Cost Estimating Used To Develop Cost | Yes | (f) Type of Design Contract | Design-Bid-Build | (a) Standard or Repetitive Design | Yes | (b) Where Design Was Most Recently Used | PMRF, HI | (a) Production of Plans and Specifications | 9,500 | (b) All Other Design Costs | 6,300 | (c) Total Design Costs | 15,800 | (d) Contract | 11,060 | (e) In-House | 4,740 |
| (a) Date Design Started  | Sep 2011  |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (b) Percent Complete As Of November 2011   | 15%   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (c) Date 35% Design Complete   | Apr 2012  |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (d) Date Design Complete   | Nov 2012  |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (e) Parametric Cost Estimating Used To Develop Cost  | Yes   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (f) Type of Design Contract  | Design-Bid-Build                                  |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (a) Standard or Repetitive Design  | Yes   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (b) Where Design Was Most Recently Used  | PMRF, HI  |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (a) Production of Plans and Specifications   | 9,500   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (b) All Other Design Costs   | 6,300   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (c) Total Design Costs   | 15,800  |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (d) Contract   | 11,060  |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |
| (e) In-House   | 4,740   |                                     |                         |          |  |     |                              |          |                          |          |   |     |                             |                  |                                   |     |   |          |  |       |                            |       |                        |        |              |        |              |       |



| <b>1. COMPONENT</b><br>MDA  | <b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b> | <b>2. DATE</b><br>Feb 2012                           |  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
|---|---|--|--|-------------------------|-------------------------------|-------|---------|---------|-------------------------------|-------|---------------|--------|-----------------------------|-------|------------|-------|----------------------------------|-------|---------|-------|-------------------------------|-------|---------------|--------|---------------------|-------|---------|--------|--|--|-----------|---------|--|--|--|--|---------------------------------|-------|------|-------|---|-------|---------|--------|--|--|-----------|--------|--|--|-------------|---------|--|--|
| <b>3. INSTALLATION AND LOCATION</b><br>Deveselu, Romania  |   |  |  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| <b>4. PROJECT TITLE</b><br>Aegis Ashore Missile Defense System Complex  | <b>5. PROJECT NUMBER</b><br>MDA 630               |  |  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| <b>12. SUPPLEMENTAL DATA (cont) :</b><br><br>B. Equipment associated with this project which will be provided from other appropriations:  |   |  |  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| <table border="0" style="width: 100%;"> <tr> <th style="text-align: left;"><u>Equipment<br/>Nomenclature</u></th> <th style="text-align: left;"><u>Procuring<br/>Appropriation</u></th> <th style="text-align: left;"><u>Fiscal Year<br/>Appropriated<br/>or Requested</u></th> <th style="text-align: right;"><u>Cost<br/>(\$000)</u></th> </tr> <tr> <td>Aegis Weapon System Equipment</td> <td>RDT&amp;E</td> <td>FY12/13</td> <td style="text-align: right;">241,800</td> </tr> <tr> <td>Aegis Ashore Launch Equipment</td> <td>RDT&amp;E</td> <td>FY12/13/14/15</td> <td style="text-align: right;">36,000</td> </tr> <tr> <td>Non-Mission Comms Equipment</td> <td>RDT&amp;E</td> <td>FY13/14/15</td> <td style="text-align: right;">3,800</td> </tr> <tr> <td>Mission Communications Equipment</td> <td>RDT&amp;E</td> <td>FY13/14</td> <td style="text-align: right;">8,500</td> </tr> <tr> <td>Command and Control Equipment</td> <td>RDT&amp;E</td> <td>FY12/13/14/15</td> <td style="text-align: right;">27,000</td> </tr> <tr> <td>Ancillary Equipment</td> <td>RDT&amp;E</td> <td>FY11/12</td> <td style="text-align: right; border-bottom: 1px solid black;">41,500</td> </tr> <tr> <td></td> <td></td> <td>SUB-TOTAL</td> <td style="text-align: right;">358,600</td> </tr> <tr> <td colspan="4" style="padding-top: 10px;"> <u>Reconstitutuable Deckhouse*</u><br/>           Moorestown, NJ**         </td> </tr> <tr> <td>Disassembly/pack/ship Deckhouse</td> <td>RDT&amp;E</td> <td>FY14</td> <td style="text-align: right;">6,245</td> </tr> <tr> <td>Installation and<br/>  reassembly in Romania</td> <td>RDT&amp;E</td> <td>FY14/15</td> <td style="text-align: right; border-bottom: 1px solid black;">10,490</td> </tr> <tr> <td></td> <td></td> <td>SUB-TOTAL</td> <td style="text-align: right;">16,735</td> </tr> <tr> <td></td> <td></td> <td>RDT&amp;E TOTAL</td> <td style="text-align: right;">375,335</td> </tr> </table> | <u>Equipment<br/>Nomenclature</u>                 | <u>Procuring<br/>Appropriation</u>                   | <u>Fiscal Year<br/>Appropriated<br/>or Requested</u> | <u>Cost<br/>(\$000)</u> | Aegis Weapon System Equipment | RDT&E | FY12/13 | 241,800 | Aegis Ashore Launch Equipment | RDT&E | FY12/13/14/15 | 36,000 | Non-Mission Comms Equipment | RDT&E | FY13/14/15 | 3,800 | Mission Communications Equipment | RDT&E | FY13/14 | 8,500 | Command and Control Equipment | RDT&E | FY12/13/14/15 | 27,000 | Ancillary Equipment | RDT&E | FY11/12 | 41,500 |  |  | SUB-TOTAL | 358,600 | <u>Reconstitutuable Deckhouse*</u><br>Moorestown, NJ** |  |  |  | Disassembly/pack/ship Deckhouse | RDT&E | FY14 | 6,245 | Installation and<br>reassembly in Romania | RDT&E | FY14/15 | 10,490 |  |  | SUB-TOTAL | 16,735 |  |  | RDT&E TOTAL | 375,335 |  |  |
| <u>Equipment<br/>Nomenclature</u>   | <u>Procuring<br/>Appropriation</u>                | <u>Fiscal Year<br/>Appropriated<br/>or Requested</u> | <u>Cost<br/>(\$000)</u>                              |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Aegis Weapon System Equipment   | RDT&E   | FY12/13  | 241,800  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Aegis Ashore Launch Equipment   | RDT&E   | FY12/13/14/15  | 36,000   |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Non-Mission Comms Equipment   | RDT&E   | FY13/14/15   | 3,800  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Mission Communications Equipment  | RDT&E   | FY13/14  | 8,500  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Command and Control Equipment   | RDT&E   | FY12/13/14/15  | 27,000   |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Ancillary Equipment   | RDT&E   | FY11/12  | 41,500   |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
|   |   | SUB-TOTAL  | 358,600  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| <u>Reconstitutuable Deckhouse*</u><br>Moorestown, NJ**  |   |  |  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Disassembly/pack/ship Deckhouse   | RDT&E   | FY14   | 6,245  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| Installation and<br>reassembly in Romania   | RDT&E   | FY14/15  | 10,490   |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
|   |   | SUB-TOTAL  | 16,735   |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
|   |   | RDT&E TOTAL  | 375,335  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |
| <p>*-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.</p> <p>**-Radar Deckhouse previously acquired as part of MDA project 627</p>   |   |  |  |                         |                               |       |         |         |                               |       |               |        |                             |       |            |       |                                  |       |         |       |                               |       |               |        |                     |       |         |        |  |  |           |         |  |  |  |  |                                 |       |      |       |   |       |         |        |  |  |           |        |  |  |             |         |  |  |

|  |  |  |   |                          |                     |                                  |
|--|--|--|---|--------------------------|---------------------|----------------------------------|
| 1. COMPONENT<br>MDA  |  | FY 2013 MILITARY CONSTRUCTION PROJECT DATA |   |                          | 2. DATE<br>Feb 2012 |                                  |
| 3. INSTALLATION AND LOCATION<br>Various Worldwide Locations  |  |  | 4. PROJECT TITLE<br>Planning and Design |                          |                     |                                  |
| 5. PROGRAM ELEMENT<br>N/A  |  | 6. CATEGORY CODE<br>N/A                    |   | 7. PROJECT NUMBER<br>N/A |                     | 8. PROJECT COST (\$000)<br>4,548 |
| 9. COST ESTIMATES  |  |  |   |                          |                     |                                  |
| ITEM   |  |  | U/M                                     | QUANTITY                 | UNIT COST           | COST (\$000)                     |
| Planning and Design  |  |  | LS                                      |                          |                     | 4,548                            |
|  |  |  |   |                          |                     |                                  |
| ESTMATED CONTRACT COST   |  |  |   |                          |                     | 4,548                            |
| CONTINGENCY PERCENT (0.0%)   |  |  |   |                          |                     |                                  |
| SUBTOTAL   |  |  |   |                          |                     | 4,548                            |
| SUPERVISION, INSPECTION & OVERHEAD (0.0%)  |  |  |   |                          |                     | 0                                |
| TOTAL REQUEST  |  |  |   |                          |                     | 4,548                            |
| TOTAL REQUEST (ROUNDED)  |  |  |   |                          |                     | 4,548                            |
| INSTALLED EQPT-OTHER APPROPRIATIONS  |  |  |   |                          |                     | (0)                              |
| 10. DESCRIPTION OF PROPOSED CONSTRUCTION: The funds requested will be used to provide financing for architectural and engineering services and construction design of Missile Defense Agency (MDA) Military Construction projects.   |  |  |   |                          |                     |                                  |
| 11. REQ: As required   |  |  |   |                          |                     |                                  |
| <u>REQUIREMENT:</u> 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 2013, and accomplish planning and design for future projects with a long lead-time to be included in subsequent MDA Military Construction programs. |  |  |   |                          |                     |                                  |

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2013 Missile Defense Agency **Date:** February 2012

|  |  |
|--|--|
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency | <b>P-1 Line Item Nomenclature:</b><br>MD07 - THAAD |
|--|--|

|   |  |   |
|---|--|---|
| <b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B | <b>Program Elements for Code B Items:</b> 0603881C, 0603884C | <b>Other Related Program Elements:</b> 0603881C, 0603884C |
|---|--|---|

| Resource Summary                             | Prior Years | FY 2011 | FY 2012 | FY 2013 Base | FY 2013 OCO | FY 2013 Total | FY 2014 | FY 2015 | FY 2016 | FY 2017 | To Complete | Total     |
|--|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|-------------|-----------|
| Procurement Quantity (Each)                  | 26          | 22      | 42      | 36           | 0           | 36            | 36      | 36      | 36      | 36      | 183         | 453       |
| Gross/Weapon System Cost (\$ in Millions)    | 523.694     | 583.629 | 709.150 | 460.728      | 0.000       | 460.728       | 565.938 | 447.427 | 490.197 | 463.739 | 2,119.100   | 6,363.602 |
| Less PY Advance Procurement (\$ in Millions) | 0.000       | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000   | 0.000   | 0.000   | 0.000   | 0.000       | 0.000     |
| Net Procurement (P1) (\$ in Millions)        | 523.694     | 583.629 | 709.150 | 460.728      | 0.000       | 460.728       | 565.938 | 447.427 | 490.197 | 463.739 | 2,119.100   | 6,363.602 |
| Plus CY Advance Procurement (\$ in Millions) | 0.000       | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000   | 0.000   | 0.000   | 0.000   | 0.000       | 0.000     |
| Total Obligation Authority (\$ in Millions)  | 523.694     | 583.629 | 709.150 | 460.728      | 0.000       | 460.728       | 565.938 | 447.427 | 490.197 | 463.739 | 2,119.100   | 6,363.602 |

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

|  |        |        |        |        |       |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| Initial Spares (\$ in Millions)                | 0.000  | 0.000  | 0.000  | 0.000  | 0.000 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| Flyaway Unit Cost (\$ in Millions)             | 0.000  | 12.100 | 11.751 | 11.020 | 0.000 | 11.020 | 10.824 | 10.737 | 10.751 | 10.783 | 11.580 | 89.546 |
| Gross/Weapon System Unit Cost (\$ in Millions) | 20.142 | 26.529 | 16.885 | 12.798 | 0.000 | 12.798 | 15.721 | 12.429 | 13.617 | 12.882 | 11.580 | 14.048 |

**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 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 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) each and 1 AN/TPY-2 Radar (budgeted separately).

| Item Schedule                         |              | ID CD | Prior Years      |            |                   | FY 2011          |            |                   | FY 2012          |            |                   | FY 2013 Base     |            |                   | FY 2013 OCO      |            |                   | FY 2013 Total    |            |                   |
|---------------------------------------|--------------|-------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|
| Item Nomenclature*                    | Exhibits     |       | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) |
| THAAD                                 | P5, P5A, P21 | B     | 20.142           | 26         | 523.694           | 26.529           | 22         | 583.629           | 16.885           | 42         | 709.150           | 12.798           | 36         | 460.728           | 0.000            | 0          | 0.000             | 12.798           | 36         | 460.728           |
| <b>Total Gross/Weapon System Cost</b> |              |       |                  |            | <b>523.694</b>    |                  |            | <b>583.629</b>    |                  |            | <b>709.150</b>    |                  |            | <b>460.728</b>    |                  |            | <b>0.000</b>      |                  |            | <b>460.728</b>    |

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

**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, and all associated peculiar support equipment to include the Mobile Support Truck, Generator set, spares transport shelter, and the Battery logistics Operation Center. FY 2012 Obsolescence Mitigation includes life of type buy of 6 A-2 HEMTT Transporters to support total Launcher procurement. RDT&E funded tactical hardware (initial two THAAD batteries) are not included in the costs above.

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| <b>Exhibit P-40, Budget Item Justification Sheet:</b> PB 2013 Missile Defense Agency   |  | <b>Date:</b> February 2012                                |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency   |  | <b>P-1 Line Item Nomenclature:</b><br>MD07 - THAAD        |
| <b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B  | <b>Program Elements for Code B Items:</b> 0603881C, 0603884C | <b>Other Related Program Elements:</b> 0603881C, 0603884C |
| <p>"Procurement Quantity" and "Flyaway Unit Cost" above represents interceptors only, but the "Net Procurement" cost above includes the costs of all hardware. FY 2011, FY 2012 and FY 2014 funding includes procurement of significant numbers of ground components, which affects the "Gross Weapon System Unit Cost".</p> |  |   |
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|  |  |       |                  |                 |                   |                  |                   |                   |                  |   |                   |                  |                 |                     |   |                 |                   |                  |                 |                   |  |               |  |
|--|--|-------|------------------|-----------------|-------------------|------------------|-------------------|-------------------|------------------|---|-------------------|------------------|-----------------|---------------------|---|-----------------|-------------------|------------------|-----------------|-------------------|--|---------------|--|
| Exhibit P-5, Cost Analysis: PB 2013 Missile Defense Agency   |  |       |                  |                 |                   |                  |                   |                   |                  |   |                   |                  |                 | Date: February 2012 |   |                 |                   |                  |                 |                   |  |               |  |
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17  |  |       |                  |                 |                   |                  | MDAP Code:<br>362 |                   |                  | P-1 Line Item Nomenclature:<br>MD07 - THAAD |                   |                  |                 |                     | Item Nomenclature (Item Number, Item Name, DODIC):<br>THAAD |                 |                   |                  |                 |                   |  |               |  |
| Resource Summary   |  |       |                  |                 |                   |                  | Prior Years       |                   |                  | FY 2011                                     |                   |                  | FY 2012         |                     |   | FY 2013 Base    |                   |                  | FY 2013 OCO     |                   |  | FY 2013 Total |  |
| Procurement Quantity (Each)  |  |       |                  |                 |                   |                  | 26                |                   |                  | 22  |                   |                  | 42              |                     |   | 36              |                   |                  | 0               |                   |  | 36            |  |
| Gross/Weapon System Cost (\$ in Millions)  |  |       |                  |                 |                   |                  | 523.694           |                   |                  | 583.629                                     |                   |                  | 709.150         |                     |   | 460.728         |                   |                  | 0.000           |                   |  | 460.728       |  |
| Less PY Advance Procurement (\$ in Millions)   |  |       |                  |                 |                   |                  | 0.000             |                   |                  | 0.000                                       |                   |                  | 0.000           |                     |   | 0.000           |                   |                  | 0.000           |                   |  | 0.000         |  |
| Net Procurement (P1) (\$ in Millions)  |  |       |                  |                 |                   |                  | 523.694           |                   |                  | 583.629                                     |                   |                  | 709.150         |                     |   | 460.728         |                   |                  | 0.000           |                   |  | 460.728       |  |
| Plus CY Advance Procurement (\$ in Millions)   |  |       |                  |                 |                   |                  | 0.000             |                   |                  | 0.000                                       |                   |                  | 0.000           |                     |   | 0.000           |                   |                  | 0.000           |                   |  | 0.000         |  |
| Total Obligation Authority (\$ in Millions)  |  |       |                  |                 |                   |                  | 523.694           |                   |                  | 583.629                                     |                   |                  | 709.150         |                     |   | 460.728         |                   |                  | 0.000           |                   |  | 460.728       |  |
| (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)   |  |       |                  |                 |                   |                  |                   |                   |                  |   |                   |                  |                 |                     |   |                 |                   |                  |                 |                   |  |               |  |
| Initial Spares (\$ in Millions)  |  |       |                  |                 |                   |                  | -                 |                   |                  | -   |                   |                  | -               |                     |   | -               |                   |                  | -               |                   |  | -             |  |
| Gross/Weapon System Unit Cost (\$ in Millions)   |  |       |                  |                 |                   |                  | 20.142            |                   |                  | 26.529                                      |                   |                  | 16.885          |                     |   | 12.798          |                   |                  | 0.000           |                   |  | 12.798        |  |
| Cost Elements<br>(† indicates the presence of a P-5A)  |  | ID CD | Prior Years      |                 |                   | FY 2011          |                   |                   | FY 2012          |   |                   | FY 2013 Base     |                 |                     | FY 2013 OCO   |                 |                   | FY 2013 Total    |                 |                   |  |               |  |
|  |  |       | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each)   | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each)                             | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M)   | Unit Cost (\$ M)  | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) |  |               |  |
| Hardware Cost  |  |       |                  |                 |                   |                  |                   |                   |                  |   |                   |                  |                 |                     |   |                 |                   |                  |                 |                   |  |               |  |
| Recurring Cost   |  |       |                  |                 |                   |                  |                   |                   |                  |   |                   |                  |                 |                     |   |                 |                   |                  |                 |                   |  |               |  |
| † Interceptor  |  | B     | 14.481           | 26              | 376.502           | 12.100           | 22                | 266.200           | 11.751           | 42  | 493.556           | 11.020           | 36              | 396.707             | 0.000   | 0               | 0.000             | 11.020           | 36              | 396.707           |  |               |  |
| † Launcher   |  | B     | 9.167            | 6               | 55.000            | 9.125            | 12                | 109.500           | 7.488            | 6   | 44.929            | 0.000            | 0               | 0.000               | 0.000   | 0               | 0.000             | 0.000            | 0               | 0.000             |  |               |  |
| Support Equipment  |  | B     | 92.192           | 1               | 92.192            | 147.329          | 1                 | 147.329           | 32.402           | 1   | 32.402            | 1.927            | 1               | 1.927               | 0.000   | 0               | 0.000             | 1.927            | 1               | 1.927             |  |               |  |
| † TFCC Tactical Station Group  |  | B     | 0.000            | 0               | 0.000             | 10.100           | 6                 | 60.600            | 9.258            | 2   | 18.516            | 0.000            | 0               | 0.000               | 0.000   | 0               | 0.000             | 0.000            | 0               | 0.000             |  |               |  |
| Total Recurring Cost   |  |       |                  |                 | 523.694           |                  |                   | 583.629           |                  |   | 589.403           |                  |                 | 398.634             |   |                 | 0.000             |                  |                 | 398.634           |  |               |  |
| Total Hardware Cost  |  |       |                  |                 | 523.694           |                  |                   | 583.629           |                  |   | 589.403           |                  |                 | 398.634             |   |                 | 0.000             |                  |                 | 398.634           |  |               |  |
| Support Cost   |  |       |                  |                 |                   |                  |                   |                   |                  |   |                   |                  |                 |                     |   |                 |                   |                  |                 |                   |  |               |  |
| Production Support & Testing   |  |       | 0.000            | 0               | 0.000             | 0.000            | 0                 | 0.000             | 63.507           | 1   | 63.507            | 52.652           | 1               | 52.652              | 0.000   | 0               | 0.000             | 52.652           | 1               | 52.652            |  |               |  |
| Program Operations   |  |       | 0.000            | 0               | 0.000             | 0.000            | 0                 | 0.000             | 55.259           | 1   | 55.259            | 0.000            | 0               | 0.000               | 0.000   | 0               | 0.000             | 0.000            | 0               | 0.000             |  |               |  |
| Training   |  |       | 0.000            | 0               | 0.000             | 0.000            | 0                 | 0.000             | 0.981            | 1   | 0.981             | 9.442            | 1               | 9.442               | 0.000   | 0               | 0.000             | 9.442            | 1               | 9.442             |  |               |  |
| Total Support Cost   |  |       |                  |                 | 0.000             |                  |                   | 0.000             |                  |   | 119.747           |                  |                 | 62.094              |   |                 | 0.000             |                  |                 | 62.094            |  |               |  |
| Gross Weapon System Cost   |  |       |                  |                 | 523.694           |                  |                   | 583.629           |                  |   | 709.150           |                  |                 | 460.728             |   |                 | 0.000             |                  |                 | 460.728           |  |               |  |
| Remarks:<br>"Procurement Quantity" above represents interceptors only, but the "Net Procurement" cost above includes the costs of all hardware. FY 2011 and FY 2012 funding includes procurement of significant numbers of ground components, which affects the "Gross Weapon System Unit Cost". |  |       |                  |                 |                   |                  |                   |                   |                  |   |                   |                  |                 |                     |   |                 |                   |                  |                 |                   |  |               |  |

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| Exhibit P-5A, Budget Procurement History and Planning: PB 2013 Missile Defense Agency |             |      |                              |   |                     |            |                        |               |                             | Date: February 2012 |                  |                |
|---|-------------|------|------------------------------|---|---------------------|------------|------------------------|---------------|-----------------------------|---------------------|------------------|----------------|
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17       |             |      |                              | P-1 Line Item Nomenclature:<br>MD07 - THAAD |                     |            |                        |               | Item Nomenclature:<br>THAAD |                     |                  |                |
| Cost Elements<br>(† indicates the presence of a P-21)                                 | O<br>C<br>O | FY   | Contractor and Location      | Contract Method and Type                    | Location of PCO     | Award Date | Date of First Delivery | Qty<br>(Each) | Unit Cost<br>(\$ M )        | Specs Avail Now?    | Date Revsn Avail | RFP Issue Date |
| †Interceptor, Lot 1   |             | 2010 | Lockheed Martin / Troy, AL   | SS / FPIF                                   | MDA, Huntsville, AL | Mar 2011   | Jul 2012               | 26            | 14.480                      | Y                   |                  | Oct 2009       |
| †Interceptor, Lot 2   |             | 2011 | Lockheed Martin / Troy, AL   | SS / FPIF                                   | MDA, Huntsville, AL | Mar 2011   | May 2013               | 22            | 12.100                      | Y                   |                  | Oct 2009       |
| †Interceptor, Lot 4   |             | 2012 | Lockheed Martin / Troy, AL   | SS / FPIF                                   | MDA, Huntsville, AL | Jan 2012   | Apr 2014               | 42            | 11.750                      | Y                   |                  | Aug 2011       |
| †Interceptor, Lot 5   |             | 2013 | Lockheed Martin / Troy, AL   | SS / FPIF                                   | MDA, Huntsville, AL | Jan 2013   | Apr 2015               | 36            | 11.020                      | Y                   |                  |                |
| †Launcher, Lot 1  |             | 2010 | Lockheed Martin / Camden, AR | SS / FFP                                    | MDA, Huntsville, AL | May 2011   | Apr 2013               | 6             | 9.170                       | Y                   |                  | Oct 2009       |
| †Launcher, Lot 2  |             | 2011 | Lockheed Martin / Camden, AR | SS / FFP                                    | MDA, Huntsville, AL | May 2011   | Oct 2013               | 6             | 9.130                       | Y                   |                  | Oct 2009       |
| †Launcher, Lot 3  |             | 2011 | Lockheed Martin / Camden, AR | SS / FPIF                                   | MDA, Huntsville, AL | Jan 2012   | Apr 2014               | 6             | 9.130                       | Y                   |                  | Aug 2011       |
| †Launcher, Lot 4  |             | 2012 | Lockheed Martin / Camden, AR | SS / FPIF                                   | MDA, Huntsville, AL | Jan 2012   | Oct 2014               | 6             | 7.490                       | Y                   |                  | Aug 2011       |
| †TFCC Tactical Station Group, Lot 2   |             | 2011 | Lockheed Martin / Camden, AR | SS / FFP                                    | MDA, Huntsville, AL | Mar 2011   | May 2013               | 4             | 10.100                      | Y                   |                  | Oct 2009       |
| †TFCC Tactical Station Group, Lot 3   |             | 2011 | Lockheed Martin / Camden, AR | SS / FFP                                    | MDA, Huntsville, AL | Jan 2012   | May 2014               | 2             | 10.100                      | Y                   |                  | Aug 2011       |
| †TFCC Tactical Station Group, Lot 4   |             | 2012 | Lockheed Martin / Camden, AR | SS / FPIF                                   | MDA, Huntsville, AL | Jan 2012   | Aug 2014               | 2             | 9.260                       | Y                   |                  | Aug 2011       |
| Remarks:  |             |      |                              |   |                     |            |                        |               |                             |                     |                  |                |

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| Exhibit P-21, Budget Production Schedule: PB 2013 Missile Defense Agency        |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             | Date: February 2012 |             |             |                    |             |             |             |             |    |   |  |  |             |
|---|--------------|------|----------------------|-------------|-------------------------------|---------------------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|-----------------------------|---------------------|-------------|-------------|--------------------|-------------|-------------|-------------|-------------|----|---|--|--|-------------|
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17 |              |      |                      |             |                               |                                 | P-1 Line Item Nomenclature:<br>MD07 - THAAD |             |             |             |             |             |             |             |             |             |                  |             |             |             |             | Item Nomenclature:<br>THAAD |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
| COST ELEMENTS<br>Units in Each  |              |      |                      |             |                               |                                 | Fiscal Year 2012                            |             |             |             |             |             |             |             |             |             | Fiscal Year 2013 |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
| O<br>C<br>O   | MFR<br>Ref # | FY   | SERVICE <sup>‡</sup> | PROC<br>QTY | ACCEP<br>PRIOR<br>TO 1<br>OCT | BAL<br>DUE<br>AS<br>OF 1<br>OCT | Calendar Year 2012                          |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             | Calendar Year 2013 |             |             |             |             |    |   |  |  | B<br>A<br>L |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T                                 | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N                 | F<br>E<br>B         | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y        | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P |    |   |  |  |             |
| Interceptor - Lot 1   |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 1            | 2010 | MDA                  | 26          | 0                             | 26                              | -   | -           | -           | -           | -           | -           | -           | -           | -           | 1           | 1                | 1           | 3           | 3           | 3           | 3                           | 3                   | 3           | 3           | 3                  | 2           |             |             |             |    |   |  |  |             |
| Interceptor - Lot 2   |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 2            | 2011 | MDA                  | 22          | 0                             | 22                              | -   | -           | -           | -           | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | -                  | 1           | 3           | 3           | 3           | 3  | 9 |  |  |             |
| Interceptor - Lot 4   |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 3            | 2012 | MDA                  | 42          | 0                             | 42                              | -   | -           | -           | A -         | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | -                  | -           | -           | -           | -           | 42 |   |  |  |             |
| Interceptor - Lot 5   |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 4            | 2013 | MDA                  | 36          | 0                             | 36                              | -   | -           | -           | -           | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | A -                         | -                   | -           | -           | -                  | -           | -           | -           | -           | 36 |   |  |  |             |
| Launcher - Lot 1  |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 5            | 2010 | MDA                  | 6           | 0                             | 6                               | -   | -           | -           | -           | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | 1                  | 1           | 1           | 1           | 1           | 1  |   |  |  |             |
| Launcher - Lot 2  |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 6            | 2011 | MDA                  | 6           | 0                             | 6                               | -   | -           | -           | -           | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | -                  | -           | -           | -           | -           | 6  |   |  |  |             |
| Launcher - Lot 3  |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 7            | 2011 | MDA                  | 6           | 0                             | 6                               | -   | -           | -           | A -         | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | -                  | -           | -           | -           | -           | 6  |   |  |  |             |
| Launcher - Lot 4  |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 8            | 2012 | MDA                  | 6           | 0                             | 6                               | -   | -           | -           | A -         | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | -                  | -           | -           | -           | -           | 6  |   |  |  |             |
| TFCC Tactical Station Group - Lot 2   |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 9            | 2011 | MDA                  | 4           | 0                             | 4                               | -   | -           | -           | -           | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | 1                  | 1           | -           | 1           | 1           |    |   |  |  |             |
| TFCC Tactical Station Group - Lot 3   |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 10           | 2011 | MDA                  | 2           | 0                             | 2                               | -   | -           | -           | A -         | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | -                  | -           | -           | -           | -           | 2  |   |  |  |             |
| TFCC Tactical Station Group - Lot 4   |              |      |                      |             |                               |                                 |   |             |             |             |             |             |             |             |             |             |                  |             |             |             |             |                             |                     |             |             |                    |             |             |             |             |    |   |  |  |             |
|   | 11           | 2012 | MDA                  | 2           | 0                             | 2                               | -   | -           | -           | A -         | -           | -           | -           | -           | -           | -           | -                | -           | -           | -           | -           | -                           | -                   | -           | -           | -                  | -           | -           | -           | -           | 2  |   |  |  |             |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T                                 | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N                 | F<br>E<br>B         | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y        | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P |    |   |  |  |             |

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| Exhibit P-21, Budget Production Schedule: PB 2013 Missile Defense Agency        |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             | Date: February 2012 |             |             |                    |             |             |             |             |             |  |  |  |
|---|--------------|------|----------------------|-------------|-------------------------------|---------------------------------|--------------------|-------------|-------------|---|-------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-----------------------------|-------------|-------------|---------------------|-------------|-------------|--------------------|-------------|-------------|-------------|-------------|-------------|--|--|--|
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17 |              |      |                      |             |                               |                                 |                    |             |             | P-1 Line Item Nomenclature:<br>MD07 - THAAD |             |             |             |             |             |             |                  |             |             | Item Nomenclature:<br>THAAD |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| COST ELEMENTS<br>Units in Each  |              |      |                      |             |                               |                                 | Fiscal Year 2016   |             |             |   |             |             |             |             |             |             | Fiscal Year 2017 |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| O<br>C<br>O   | MFR<br>Ref # | FY   | SERVICE <sup>±</sup> | PROC<br>QTY | ACCEP<br>PRIOR<br>TO 1<br>OCT | BAL<br>DUE<br>AS<br>OF 1<br>OCT | Calendar Year 2016 |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             | Calendar Year 2017 |             |             |             |             |             |  |  |  |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T        | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N                                 | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V                 | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B         | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y        | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P | B<br>A<br>L |  |  |  |
| Interceptor - Lot 1   |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 1            | 2010 | MDA                  | 26          | 26                            | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| Interceptor - Lot 2   |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 2            | 2011 | MDA                  | 22          | 22                            | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| Interceptor - Lot 4   |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 3            | 2012 | MDA                  | 42          | 42                            | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| Interceptor - Lot 5   |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 4            | 2013 | MDA                  | 36          | 18                            | 18                              | 3                  | 3           | 3           | 3   | 3           | 3           |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| Launcher - Lot 1  |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 5            | 2010 | MDA                  | 6           | 6                             | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| Launcher - Lot 2  |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 6            | 2011 | MDA                  | 6           | 6                             | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| Launcher - Lot 3  |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 7            | 2011 | MDA                  | 6           | 6                             | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| Launcher - Lot 4  |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 8            | 2012 | MDA                  | 6           | 6                             | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| TFCC Tactical Station Group - Lot 2   |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 9            | 2011 | MDA                  | 4           | 4                             | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| TFCC Tactical Station Group - Lot 3   |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 10           | 2011 | MDA                  | 2           | 2                             | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
| TFCC Tactical Station Group - Lot 4   |              |      |                      |             |                               |                                 |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   | 11           | 2012 | MDA                  | 2           | 2                             | 0                               |                    |             |             |   |             |             |             |             |             |             |                  |             |             |                             |             |             |                     |             |             |                    |             |             |             |             |             |  |  |  |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T        | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N                                 | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V                 | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B         | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y        | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P |             |  |  |  |

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| <b>Exhibit P-21, Budget Production Schedule:</b> PB 2013 Missile Defense Agency        |  |  | <b>Date:</b> February 2012         |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D / BA 1 / BSA 17 |  | <b>P-1 Line Item Nomenclature:</b><br>MD07 - THAAD | <b>Item Nomenclature:</b><br>THAAD |

|           |                              | PRODUCTION RATES (Units/Year) |       |     | PROCUREMENT LEADTIME (Months) |                 |         |                   |                    |                 |         |                   |
|-----------|------------------------------|-------------------------------|-------|-----|-------------------------------|-----------------|---------|-------------------|--------------------|-----------------|---------|-------------------|
| MFR Ref # | MFR Name - Location          | MSR                           | 1-8-5 | MAX | Initial                       |                 |         |                   | Reorder            |                 |         |                   |
|           |                              |                               |       |     | ALT Prior to Oct 1            | ALT After Oct 1 | Mfg PLT | Total After Oct 1 | ALT Prior to Oct 1 | ALT After Oct 1 | Mfg PLT | Total After Oct 1 |
| 1         | Lockheed Martin - Troy, AL   | 12                            | 48    | 60  | 6                             | 6               | 16      | 22                | 6                  | 4               | 27      | 31                |
| 2         | Lockheed Martin - Troy, AL   | 12                            | 48    | 60  | 6                             | 5               | 26      | 31                | 6                  | 4               | 27      | 31                |
| 3         | Lockheed Martin - Troy, AL   | 12                            | 48    | 60  | 6                             | 4               | 27      | 31                | 6                  | 4               | 27      | 31                |
| 4         | Lockheed Martin - Troy, AL   | 12                            | 48    | 60  | 6                             | 4               | 27      | 31                | 6                  | 4               | 27      | 31                |
| 5         | Lockheed Martin - Camden, AR | 12                            | 12    | 24  | 6                             | 8               | 23      | 31                | 6                  | 4               | 21      | 25                |
| 6         | Lockheed Martin - Camden, AR | 12                            | 12    | 24  | 6                             | 8               | 23      | 31                | 6                  | 4               | 21      | 25                |
| 7         | Lockheed Martin - Camden, AR | 12                            | 12    | 24  | 6                             | 4               | 21      | 25                | 6                  | 4               | 21      | 25                |
| 8         | Lockheed Martin - Camden, AR | 12                            | 12    | 24  | 6                             | 3               | 21      | 24                | 6                  | 3               | 21      | 24                |
| 9         | Lockheed Martin - Camden, AR | 8                             | 8     | 8   | 6                             | 5               | 24      | 29                | 6                  | 4               | 24      | 28                |
| 10        | Lockheed Martin - Camden, AR | 8                             | 8     | 8   | 6                             | 4               | 24      | 28                | 6                  | 4               | 24      | 28                |
| 11        | Lockheed Martin - Camden, AR | 8                             | 8     | 8   | 6                             | 3               | 24      | 27                | 6                  | 3               | 24      | 27                |

**Remarks:**  
 ‡ Delivery rows marked with the ♦ symbol indicate that they are funded through a separate Line Item. Additionally, deliveries for such components are not shown in this exhibit if they occur after the last delivery for the budgeting component. See the respective components' exhibits for details, including the full delivery schedule.

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|--|--|--|--|--|--|--|--|---|--|----------------------------|--|--|--|
| <b>Exhibit P-40, Budget Item Justification Sheet:</b> PB 2013 Missile Defense Agency   |  |  |  |  |  |  |  |   |  | <b>Date:</b> February 2012 |  |  |  |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency |  |  |  |  |  |  | <b>P-1 Line Item Nomenclature:</b><br>MD09 - Aegis BMD |   |  |                            |  |  |  |
| <b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B  |  |  | <b>Program Elements for Code B Items:</b> 0603892C, 0604881C |  |  |  |  | <b>Other Related Program Elements:</b> 0604881C, 0603892C, 0604880C |  |                            |  |  |  |

  

| Resource Summary                             | Prior Years | FY 2011 | FY 2012 | FY 2013 Base | FY 2013 OCO | FY 2013 Total | FY 2014 | FY 2015 | FY 2016 | FY 2017   | To Complete | Total     |
|--|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|-----------|-------------|-----------|
| Procurement Quantity (Each)                  | 18          | 26      | 46      | 29           | 0           | 29            | 69      | 82      | 77      | 72        | 0           | 419       |
| Gross/Weapon System Cost (\$ in Millions)    | 327.557     | 283.280 | 565.393 | 389.626      | 0.000       | 389.626       | 757.031 | 834.349 | 775.736 | 1,002.957 | 0.000       | 4,935.929 |
| Less PY Advance Procurement (\$ in Millions) | 0.000       | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000   | 0.000   | 0.000   | 0.000     | 0.000       | 0.000     |
| Net Procurement (P1) (\$ in Millions)        | 327.557     | 283.280 | 565.393 | 389.626      | 0.000       | 389.626       | 757.031 | 834.349 | 775.736 | 1,002.957 | 0.000       | 4,935.929 |
| Plus CY Advance Procurement (\$ in Millions) | 0.000       | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000   | 0.000   | 0.000   | 0.000     | 0.000       | 0.000     |
| Total Obligation Authority (\$ in Millions)  | 327.557     | 283.280 | 565.393 | 389.626      | 0.000       | 389.626       | 757.031 | 834.349 | 775.736 | 1,002.957 | 0.000       | 4,935.929 |

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

|  |        |        |        |        |       |        |        |        |        |        |            |            |
|--|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|------------|------------|
| Initial Spares (\$ in Millions)                | 0.000  | 0.000  | 0.000  | 0.000  | 0.000 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000      | 0.000      |
| Flyaway Unit Cost (\$ in Millions)             | 0.000  | 9.123  | 12.291 | 11.116 | 0.000 | 11.116 | 9.917  | 9.239  | 9.101  | 8.806  | Continuing | Continuing |
| Gross/Weapon System Unit Cost (\$ in Millions) | 18.198 | 10.895 | 12.291 | 13.435 | 0.000 | 13.435 | 10.971 | 10.175 | 10.074 | 13.930 | 0.000      | 11.780     |

**Description:**

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

The SM-3 Block IB will incorporate a two-color, all reflective infrared seeker, enabling longer range acquisition and increased threat discrimination. A Throttleable Divert Altitude Control System (TDACS) will provide a more flexible and lower cost alternative to the Solid Divert Altitude Control System (SDACS).

Prior Year Procurement quantity: A total of 42 SM-3 Blk IA's appropriated in FY 2008, 2009 and 2010. The SM-3 Blk IA's were transitioned from RDT&E to Procurement, Defense-Wide in FY 2009 utilizing funding from both appropriations.

  

| Item Schedule                         |              | Prior Years |                  |            | FY 2011           |                  |            | FY 2012           |                  |            | FY 2013 Base      |                  |            | FY 2013 OCO       |                  |            | FY 2013 Total     |                  |            |                   |
|---------------------------------------|--------------|-------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|
| Item Nomenclature*                    | Exhibits     | ID CD       | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) |
| Aegis BMD                             | P5, P5A, P21 | B           | 18.198           | 18         | 327.557           | 10.895           | 26         | 283.280           | 12.291           | 46         | 565.393           | 13.435           | 29         | 389.626           | 0.000            | 0          | 0.000             | 13.435           | 29         | 389.626           |
| <b>Total Gross/Weapon System Cost</b> |              |             |                  |            | <b>327.557</b>    |                  |            | <b>283.280</b>    |                  |            | <b>565.393</b>    |                  |            | <b>389.626</b>    |                  |            | <b>0.000</b>      |                  |            | <b>389.626</b>    |

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

**Justification:**

FY 2011: Full funding for 26 SM-3 Blk IA's for delivery in FY 2012 through FY 2014

FY 2012: Full funding for 46 SM-3 Blk IB's for delivery in FY 2014 through FY 2015

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| <b>Exhibit P-40, Budget Item Justification Sheet:</b> PB 2013 Missile Defense Agency   |  | <b>Date:</b> February 2012  |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency |  | <b>P-1 Line Item Nomenclature:</b><br>MD09 - Aegis BMD              |
| <b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B  | <b>Program Elements for Code B Items:</b> 0603892C, 0604881C | <b>Other Related Program Elements:</b> 0604881C, 0603892C, 0604880C |
| FY 2013: Full funding for 29 SM-3 Blk IB's for delivery in FY 2015   |  |   |

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| Exhibit P-5, Cost Analysis: PB 2013 Missile Defense Agency   |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   | Date: February 2012 |   |                   |                  |                 |                   |
|--|-------|------------------|-----------------|-------------------|------------------|-----------------|-------------------|------------------|-----------------|---|------------------|-----------------|-------------------|---------------------|---|-------------------|------------------|-----------------|-------------------|
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17  |       |                  |                 |                   |                  |                 | MDAP Code:<br>362 |                  |                 | P-1 Line Item Nomenclature:<br>MD09 - Aegis BMD |                  |                 |                   |                     | Item Nomenclature (Item Number, Item Name, DODIC):<br>Aegis BMD |                   |                  |                 |                   |
| Resource Summary   |       |                  |                 |                   |                  |                 | Prior Years       |                  |                 | FY 2011   |                  | FY 2012         |                   | FY 2013 Base        |   | FY 2013 OCO       |                  | FY 2013 Total   |                   |
| Procurement Quantity (Each)  |       |                  |                 |                   |                  |                 | 18                |                  |                 | 26  |                  | 46              |                   | 29                  |   | 0                 |                  | 29              |                   |
| Gross/Weapon System Cost (\$ in Millions)  |       |                  |                 |                   |                  |                 | 327.557           |                  |                 | 283.280   |                  | 565.393         |                   | 389.626             |   | 0.000             |                  | 389.626         |                   |
| Less PY Advance Procurement (\$ in Millions)   |       |                  |                 |                   |                  |                 | 0.000             |                  |                 | 0.000   |                  | 0.000           |                   | 0.000               |   | 0.000             |                  | 0.000           |                   |
| Net Procurement (P1) (\$ in Millions)  |       |                  |                 |                   |                  |                 | 327.557           |                  |                 | 283.280   |                  | 565.393         |                   | 389.626             |   | 0.000             |                  | 389.626         |                   |
| Plus CY Advance Procurement (\$ in Millions)   |       |                  |                 |                   |                  |                 | 0.000             |                  |                 | 0.000   |                  | 0.000           |                   | 0.000               |   | 0.000             |                  | 0.000           |                   |
| Total Obligation Authority (\$ in Millions)  |       |                  |                 |                   |                  |                 | 327.557           |                  |                 | 283.280   |                  | 565.393         |                   | 389.626             |   | 0.000             |                  | 389.626         |                   |
| (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   |                     |   |                   |                  |                 |                   |
| Initial Spares (\$ in Millions)  |       |                  |                 |                   |                  |                 | -                 |                  |                 | -   |                  | -               |                   | -                   |   | -                 |                  | -               |                   |
| Gross/Weapon System Unit Cost (\$ in Millions)   |       |                  |                 |                   |                  |                 | 18.198            |                  |                 | 10.895  |                  | 12.291          |                   | 13.435              |   | 0.000             |                  | 13.435          |                   |
| Cost Elements<br>(† indicates the presence of a P-5A)  | ID CD | Prior Years      |                 |                   | FY 2011          |                 |                   | FY 2012          |                 |   | FY 2013 Base     |                 |                   | FY 2013 OCO         |   |                   | FY 2013 Total    |                 |                   |
|  |       | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M)                               | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M)    | Quantity (Each)   | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) |
| Flyaway Cost   |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   |                     |   |                   |                  |                 |                   |
| Recurring Cost   |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   |                     |   |                   |                  |                 |                   |
| † SM-3 Blk IA Procurement  | B     | 18.198           | 18              | 327.557           | 9.123            | 26              | 237.189           | 0.000            | 0               | 0.000   | 0.000            | 0               | 0.000             | 0.000               | 0   | 0.000             | 0.000            | 0               | 0.000             |
| † SM-3 Blk IB Procurement  | B     | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000             | 12.291           | 46              | 565.393   | 11.116           | 29              | 322.351           | 0.000               | 0   | 0.000             | 11.116           | 29              | 322.351           |
| SM-3 Blk IIA   | B     | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000   | 0.000            | 0               | 0.000             | 0.000               | 0   | 0.000             | 0.000            | 0               | 0.000             |
| Total Recurring Cost   |       |                  |                 | 327.557           |                  |                 | 237.189           |                  |                 | 565.393   |                  |                 | 322.351           |                     |   | 0.000             |                  |                 | 322.351           |
| Total Flyaway Cost   |       |                  |                 | 327.557           |                  |                 | 237.189           |                  |                 | 565.393   |                  |                 | 322.351           |                     |   | 0.000             |                  |                 | 322.351           |
| Hardware Cost  |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   |                     |   |                   |                  |                 |                   |
| Recurring Cost   |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   |                     |   |                   |                  |                 |                   |
| ABMD 3.6.1 Hardware and Installs   | B     | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000   | 7.500            | 1               | 7.500             | 0.000               | 0   | 0.000             | 7.500            | 1               | 7.500             |
| Canisters Procurement SM-3 Blk IA/IB   | B     | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000   | 23.400           | 1               | 23.400            | 0.000               | 0   | 0.000             | 23.400           | 1               | 23.400            |
| Total Recurring Cost   |       |                  |                 | 0.000             |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 30.900            |                     |   | 0.000             |                  |                 | 30.900            |
| Total Hardware Cost  |       |                  |                 | 0.000             |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 30.900            |                     |   | 0.000             |                  |                 | 30.900            |
| Support Cost   |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   |                     |   |                   |                  |                 |                   |
| SM-3 Production Engineering  |       | 0.000            | 0               | 0.000             | 46.091           | 1               | 46.091            | 0.000            | 0               | 0.000   | 36.375           | 1               | 36.375            | 0.000               | 0   | 0.000             | 36.375           | 1               | 36.375            |
| Total Support Cost   |       |                  |                 | 0.000             |                  |                 | 46.091            |                  |                 | 0.000   |                  |                 | 36.375            |                     |   | 0.000             |                  |                 | 36.375            |
| Gross Weapon System Cost   |       |                  |                 | 327.557           |                  |                 | 283.280           |                  |                 | 565.393   |                  |                 | 389.626           |                     |   | 0.000             |                  |                 | 389.626           |
| Remarks:   |       |                  |                 |                   |                  |                 |                   |                  |                 |   |                  |                 |                   |                     |   |                   |                  |                 |                   |

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| Exhibit P-5, Cost Analysis: PB 2013 Missile Defense Agency                      |                   |   | Date: February 2012   |
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17 | MDAP Code:<br>362 | P-1 Line Item Nomenclature:<br>MD09 - Aegis BMD | Item Nomenclature (Item Number, Item Name, DODIC):<br>Aegis BMD |
| N/A   |                   |   |   |

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| <b>Exhibit P-5A, Budget Procurement History and Planning:</b> PB 2013 Missile Defense Agency | <b>Date:</b> February 2012 |
|--|----------------------------|

|  |  |  |
|--|--|--|
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D / BA 1 / BSA 17 | <b>P-1 Line Item Nomenclature:</b><br>MD09 - Aegis BMD | <b>Item Nomenclature:</b><br>Aegis BMD |
|--|--|--|

| Cost Elements<br>(† indicates the presence of a P-21) | O<br>C<br>O | FY   | Contractor and Location | Contract<br>Method<br>and Type | Location<br>of PCO | Award Date | Date of First<br>Delivery | Qty<br>(Each) | Unit Cost<br>(\$ M ) | Specs<br>Avail<br>Now? | Date Revsn<br>Avail | RFP Issue<br>Date |
|---|-------------|------|-------------------------|--------------------------------|--------------------|------------|---------------------------|---------------|----------------------|------------------------|---------------------|-------------------|
| †SM-3 Blk IA Procurement                              |             | 2011 | Raytheon / Tucson, AZ   | C / CPIF                       | Dahlgren, VA       | Jan 2011   | Oct 2013                  | 26            | 9.120                | Y                      |                     | Nov 2010          |
| †SM-3 Blk IB Procurement                              |             | 2012 | Raytheon / Tucson, AZ   | C / CPIF                       | Dahlgren, VA       | Jan 2012   | Jan 2014                  | 46            | 12.290               | Y                      |                     | Aug 2011          |
| †SM-3 Blk IB Procurement                              |             | 2013 | Raytheon / Tucson, AZ   | C / CPIF                       | Dahlgren, VA       | Oct 2012   | Oct 2014                  | 29            | 11.120               | Y                      |                     | Aug 2012          |

**Remarks:**

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|   |              |      |                      |             |                               |                                 |                  |             |                    |   |             |             |             |             |             |             |                  |             |                    |                                 |             |             |             |             |             |             |             |             |             |             |             |
|---|--------------|------|----------------------|-------------|-------------------------------|---------------------------------|------------------|-------------|--------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|--------------------|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Exhibit P-21, Budget Production Schedule: PB 2013 Missile Defense Agency        |              |      |                      |             |                               |                                 |                  |             |                    |   |             |             |             |             |             |             |                  |             |                    | Date: February 2012             |             |             |             |             |             |             |             |             |             |             |             |
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17 |              |      |                      |             |                               |                                 |                  |             |                    | P-1 Line Item Nomenclature:<br>MD09 - Aegis BMD |             |             |             |             |             |             |                  |             |                    | Item Nomenclature:<br>Aegis BMD |             |             |             |             |             |             |             |             |             |             |             |
| COST ELEMENTS<br>Units in Each  |              |      |                      |             |                               |                                 | Fiscal Year 2014 |             |                    |   |             |             |             |             |             |             | Fiscal Year 2015 |             |                    |                                 |             |             |             |             |             |             |             |             |             |             |             |
| O<br>C<br>O   | MFR<br>Ref # | FY   | SERVICE <sup>‡</sup> | PROC<br>QTY | ACCEP<br>PRIOR<br>TO 1<br>OCT | BAL<br>DUE<br>AS<br>OF 1<br>OCT |                  |             | Calendar Year 2014 |   |             |             |             |             |             |             |                  |             | Calendar Year 2015 |                                 |             |             |             |             |             |             |             |             |             |             |             |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T      | N<br>O<br>V | D<br>E<br>C        | J<br>A<br>N                                     | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T        | N<br>O<br>V                     | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P | B<br>A<br>L |
| SM-3 Blk IA Procurement   |              |      |                      |             |                               |                                 |                  |             |                    |   |             |             |             |             |             |             |                  |             |                    |                                 |             |             |             |             |             |             |             |             |             |             |             |
| All Prior Years Deliveries: 18  |              |      |                      |             |                               |                                 |                  |             |                    |   |             |             |             |             |             |             |                  |             |                    |                                 |             |             |             |             |             |             |             |             |             |             |             |
|   | 1            | 2011 | MDA                  | 26          | 0                             | 26                              | 4                | 4           | 4                  | 4   | 5           | 5           |             |             |             |             |                  |             |                    |                                 |             |             |             |             |             |             |             |             |             |             |             |
| SM-3 Blk IB Procurement   |              |      |                      |             |                               |                                 |                  |             |                    |   |             |             |             |             |             |             |                  |             |                    |                                 |             |             |             |             |             |             |             |             |             |             |             |
|   | 2            | 2012 | MDA                  | 46          | 0                             | 46                              | -                | -           | -                  | 4   | 4           | 4           | 4           | 4           | 4           | 4           | 4                | 4           | 3                  | 3                               |             |             |             |             |             |             |             |             |             |             |             |
|   | 3            | 2013 | MDA                  | 29          | 0                             | 29                              | -                | -           | -                  | -   | -           | -           | -           | -           | -           | -           | -                | 2           | 2                  | 3                               | 2           | 2           | 3           | 2           | 2           | 3           | 2           | 3           | 3           |             |             |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T      | N<br>O<br>V | D<br>E<br>C        | J<br>A<br>N                                     | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T        | N<br>O<br>V                     | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P |             |



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| <b>Exhibit P-21, Budget Production Schedule:</b> PB 2013 Missile Defense Agency        |  |  | <b>Date:</b> February 2012             |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D / BA 1 / BSA 17 |  | <b>P-1 Line Item Nomenclature:</b><br>MD09 - Aegis BMD | <b>Item Nomenclature:</b><br>Aegis BMD |

|           |                       | PRODUCTION RATES (Units/Year) |       |     | PROCUREMENT LEADTIME (Months) |                 |         |                   |                    |                 |         |                   |
|-----------|-----------------------|-------------------------------|-------|-----|-------------------------------|-----------------|---------|-------------------|--------------------|-----------------|---------|-------------------|
| MFR Ref # | MFR Name - Location   | MSR                           | 1-8-5 | MAX | Initial                       |                 |         |                   | Reorder            |                 |         |                   |
|           |                       |                               |       |     | ALT Prior to Oct 1            | ALT After Oct 1 | Mfg PLT | Total After Oct 1 | ALT Prior to Oct 1 | ALT After Oct 1 | Mfg PLT | Total After Oct 1 |
| 1         | Raytheon - Tucson, AZ | 12                            | 48    | 96  | 4                             | 0               | 30      | 30                | 4                  | 0               | 30      | 30                |
| 2         | Raytheon - Tucson, AZ | 12                            | 48    | 96  | 4                             | 0               | 24      | 24                | 4                  | 0               | 24      | 24                |
| 3         | Raytheon - Tucson, AZ | 12                            | 48    | 96  | 4                             | 0               | 24      | 24                | 4                  | 0               | 24      | 24                |

**Remarks:**

‡ Delivery rows marked with the ♦ symbol indicate that they are funded through a separate Line Item. Additionally, deliveries for such components are not shown in this exhibit if they occur after the last delivery for the budgeting component. See the respective components' exhibits for details, including the full delivery schedule.

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2013 Missile Defense Agency **Date:** February 2012

|  |   |
|--|---|
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency | <b>P-1 Line Item Nomenclature:</b><br>MD11 - BMDS AN/TPY-2 Radars |
|--|---|

|   |  |   |
|---|--|---|
| <b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B | <b>Program Elements for Code B Items:</b> 0603884C | <b>Other Related Program Elements:</b> 0603884C, 0603881C |
|---|--|---|

| Resource Summary                             | Prior Years | FY 2011 | FY 2012 | FY 2013 Base | FY 2013 OCO | FY 2013 Total | FY 2014 | FY 2015 | FY 2016 | FY 2017 | To Complete | Total   |
|--|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|-------------|---------|
| Procurement Quantity (Each)                  | 1           | 0       | 2       | 1            | 0           | 1             | 0       | -       | 0       | 0       | 0           | 4       |
| Gross/Weapon System Cost (\$ in Millions)    | 191.081     | 0.000   | 380.195 | 217.244      | 0.000       | 217.244       | 0.000   | 38.648  | 0.000   | 0.000   | 0.000       | 827.168 |
| Less PY Advance Procurement (\$ in Millions) | 0.000       | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000   | 0.000   | 0.000   | 0.000   | 0.000       | 0.000   |
| Net Procurement (P1) (\$ in Millions)        | 191.081     | 0.000   | 380.195 | 217.244      | 0.000       | 217.244       | 0.000   | 38.648  | 0.000   | 0.000   | 0.000       | 827.168 |
| Plus CY Advance Procurement (\$ in Millions) | 0.000       | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000   | 0.000   | 0.000   | 0.000   | 0.000       | 0.000   |
| Total Obligation Authority (\$ in Millions)  | 191.081     | 0.000   | 380.195 | 217.244      | 0.000       | 217.244       | 0.000   | 38.648  | 0.000   | 0.000   | 0.000       | 827.168 |

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

|  |         |       |         |         |       |         |       |        |       |       |            |            |
|--|---------|-------|---------|---------|-------|---------|-------|--------|-------|-------|------------|------------|
| Initial Spares (\$ in Millions)                | 0.000   | 0.000 | 0.000   | 10.177  | 0.000 | 10.177  | 0.000 | 0.000  | 0.000 | 0.000 | Continuing | Continuing |
| Flyaway Unit Cost (\$ in Millions)             | 191.081 | 0.000 | 190.098 | 200.050 | 0.000 | 200.050 | 0.000 | 38.648 | 0.000 | 0.000 | Continuing | Continuing |
| Gross/Weapon System Unit Cost (\$ in Millions) | 191.081 | 0.000 | 190.098 | 217.244 | 0.000 | 217.244 | 0.000 | -      | 0.000 | 0.000 | 0.000      | 206.792    |

**Description:**

The AN-TPY-2 radar is an integral component of the BMDS layered network of sensors. It is easily transported and can be configured to operate either as a 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 (C2BMC) 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.

FY 2015 procures 3 Forward Based Mode Prime Power Units (PPUs) and an Electronic Equipment Unit (EEU) Kit.

| Item Schedule                         |              | ID CD | Prior Years      |            |                   | FY 2011          |            |                   | FY 2012          |            |                   | FY 2013 Base     |            |                   | FY 2013 OCO      |            |                   | FY 2013 Total    |            |                   |
|---------------------------------------|--------------|-------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|
| Item Nomenclature*                    | Exhibits     |       | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) |
| BMDS AN/TPY-2 Radars                  | P5, P5A, P21 | B     | 191.081          | 1          | 191.081           | 0.000            | 0          | 0.000             | 190.098          | 2          | 380.195           | 217.244          | 1          | 217.244           | 0.000            | 0          | 0.000             | 217.244          | 1          | 217.244           |
| <b>Total Gross/Weapon System Cost</b> |              |       |                  |            | <b>191.081</b>    |                  |            | <b>0.000</b>      |                  |            | <b>380.195</b>    |                  |            | <b>217.244</b>    |                  |            | <b>0.000</b>      |                  |            | <b>217.244</b>    |

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| <b>Exhibit P-40, Budget Item Justification Sheet:</b> PB 2013 Missile Defense Agency   |  | <b>Date:</b> February 2012  |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency   |  | <b>P-1 Line Item Nomenclature:</b><br>MD11 - BMDS AN/TPY-2 Radars |
| <b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B  | <b>Program Elements for Code B Items:</b> 0603884C | <b>Other Related Program Elements:</b> 0603884C, 0603881C         |
| <small>*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.</small> |  |   |
| <b>Justification:</b><br>FY 2012: Procure two AN/TPY-2 Radars<br>FY 2013: Procure one AN/TPY-2 Radar, plus three additional Prime Power Units (PPUs)   |  |   |

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| Exhibit P-5, Cost Analysis: PB 2013 Missile Defense Agency   |       |                  |                 |                   |                  |                 |                   |                  |                 |  |                  |                 |                   | Date: February 2012 |  |                   |                  |                 |                   |  |  |               |  |
|--|-------|------------------|-----------------|-------------------|------------------|-----------------|-------------------|------------------|-----------------|--|------------------|-----------------|-------------------|---------------------|--|-------------------|------------------|-----------------|-------------------|--|--|---------------|--|
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17  |       |                  |                 |                   |                  |                 | MDAP Code:<br>362 |                  |                 | P-1 Line Item Nomenclature:<br>MD11 - BMDS AN/TPY-2 Radars |                  |                 |                   |                     | Item Nomenclature (Item Number, Item Name, DODIC):<br>BMDS AN/TPY-2 Radars |                   |                  |                 |                   |  |  |               |  |
| Resource Summary   |       |                  |                 |                   |                  |                 | Prior Years       |                  |                 | FY 2011  |                  |                 | FY 2012           |                     |  | FY 2013 Base      |                  |                 | FY 2013 OCO       |  |  | FY 2013 Total |  |
| Procurement Quantity (Each)  |       |                  |                 |                   |                  |                 | 1                 |                  |                 | 0  |                  |                 | 2                 |                     |  | 1                 |                  |                 | 0                 |  |  | 1             |  |
| Gross/Weapon System Cost (\$ in Millions)  |       |                  |                 |                   |                  |                 | 191.081           |                  |                 | 0.000  |                  |                 | 380.195           |                     |  | 217.244           |                  |                 | 0.000             |  |  | 217.244       |  |
| Less PY Advance Procurement (\$ in Millions)   |       |                  |                 |                   |                  |                 | 0.000             |                  |                 | 0.000  |                  |                 | 0.000             |                     |  | 0.000             |                  |                 | 0.000             |  |  | 0.000         |  |
| Net Procurement (P1) (\$ in Millions)  |       |                  |                 |                   |                  |                 | 191.081           |                  |                 | 0.000  |                  |                 | 380.195           |                     |  | 217.244           |                  |                 | 0.000             |  |  | 217.244       |  |
| Plus CY Advance Procurement (\$ in Millions)   |       |                  |                 |                   |                  |                 | 0.000             |                  |                 | 0.000  |                  |                 | 0.000             |                     |  | 0.000             |                  |                 | 0.000             |  |  | 0.000         |  |
| Total Obligation Authority (\$ in Millions)  |       |                  |                 |                   |                  |                 | 191.081           |                  |                 | 0.000  |                  |                 | 380.195           |                     |  | 217.244           |                  |                 | 0.000             |  |  | 217.244       |  |
| (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) |       |                  |                 |                   |                  |                 |                   |                  |                 |  |                  |                 |                   |                     |  |                   |                  |                 |                   |  |  |               |  |
| Initial Spares (\$ in Millions)  |       |                  |                 |                   |                  |                 | -                 |                  |                 | -  |                  |                 | -                 |                     |  | -                 |                  |                 | -                 |  |  | -             |  |
| Gross/Weapon System Unit Cost (\$ in Millions)   |       |                  |                 |                   |                  |                 | 191.081           |                  |                 | 0.000  |                  |                 | 190.098           |                     |  | 217.244           |                  |                 | 0.000             |  |  | 217.244       |  |
| Cost Elements<br>(† indicates the presence of a P-5A)  | ID CD | Prior Years      |                 |                   | FY 2011          |                 |                   | FY 2012          |                 |  | FY 2013 Base     |                 |                   | FY 2013 OCO         |  |                   | FY 2013 Total    |                 |                   |  |  |               |  |
|  |       | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M)  | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M)    | Quantity (Each)  | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) |  |  |               |  |
| Hardware Cost  |       |                  |                 |                   |                  |                 |                   |                  |                 |  |                  |                 |                   |                     |  |                   |                  |                 |                   |  |  |               |  |
| Recurring Cost   |       |                  |                 |                   |                  |                 |                   |                  |                 |  |                  |                 |                   |                     |  |                   |                  |                 |                   |  |  |               |  |
| † Antenna Equipment Unit (AEU)   | B     | 144.285          | 1               | 144.285           | 0.000            | 0               | 0.000             | 144.091          | 2               | 288.181  | 143.302          | 1               | 143.302           | 0.000               | 0  | 0.000             | 143.302          | 1               | 143.302           |  |  |               |  |
| † Cooling Equipment Unit (CEU)   | B     | 7.800            | 1               | 7.800             | 0.000            | 0               | 0.000             | 7.668            | 2               | 15.336   | 7.800            | 1               | 7.800             | 0.000               | 0  | 0.000             | 7.800            | 1               | 7.800             |  |  |               |  |
| † Electronic Equipment Unit (EEU)  | B     | 23.398           | 1               | 23.398            | 0.000            | 0               | 0.000             | 23.003           | 2               | 46.006   | 23.190           | 1               | 23.190            | 0.000               | 0  | 0.000             | 23.190           | 1               | 23.190            |  |  |               |  |
| Electronic Equipment Unit (EEU) Modification Kit   | B     | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000  | 0.000            | 0               | 0.000             | 0.000               | 0  | 0.000             | 0.000            | 0               | 0.000             |  |  |               |  |
| † Forward-Based Mode Prime Power Units (PPU)   | B     | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000  | 9.124            | 3               | 27.371            | 0.000               | 0  | 0.000             | 9.124            | 3               | 27.371            |  |  |               |  |
| † Prime Power Unit (PPUs - 2 each radar system)  | B     | 15.598           | 1               | 15.598            | 0.000            | 0               | 0.000             | 15.336           | 2               | 30.672   | 15.581           | 1               | 15.581            | 0.000               | 0  | 0.000             | 15.581           | 1               | 15.581            |  |  |               |  |
| Total Recurring Cost   |       |                  |                 | 191.081           |                  |                 | 0.000             |                  |                 | 380.195  |                  |                 | 217.244           |                     |  | 0.000             |                  |                 | 217.244           |  |  |               |  |
| Total Hardware Cost  |       |                  |                 | 191.081           |                  |                 | 0.000             |                  |                 | 380.195  |                  |                 | 217.244           |                     |  | 0.000             |                  |                 | 217.244           |  |  |               |  |
| Gross Weapon System Cost   |       |                  |                 | 191.081           |                  |                 | 0.000             |                  |                 | 380.195  |                  |                 | 217.244           |                     |  | 0.000             |                  |                 | 217.244           |  |  |               |  |
| Remarks:<br>N/A  |       |                  |                 |                   |                  |                 |                   |                  |                 |  |                  |                 |                   |                     |  |                   |                  |                 |                   |  |  |               |  |

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| Exhibit P-5A, Budget Procurement History and Planning: PB 2013 Missile Defense Agency |             |      |  |                          |                     |            |                        |               | Date: February 2012                        |                  |                  |                |
|---|-------------|------|--|--------------------------|---------------------|------------|------------------------|---------------|--|------------------|------------------|----------------|
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17       |             |      | P-1 Line Item Nomenclature:<br>MD11 - BMDS AN/TPY-2 Radars |                          |                     |            |                        |               | Item Nomenclature:<br>BMDS AN/TPY-2 Radars |                  |                  |                |
| Cost Elements<br>(† indicates the presence of a P-21)                                 | O<br>C<br>O | FY   | Contractor and Location                                    | Contract Method and Type | Location of PCO     | Award Date | Date of First Delivery | Qty<br>(Each) | Unit Cost<br>(\$ M )                       | Specs Avail Now? | Date Revsn Avail | RFP Issue Date |
| †Antenna Equipment Unit (AEU)   |             | 2010 | Raytheon / Woburn, MA                                      | SS / FFP                 | MDA, Huntsville, AL | Jun 2010   | Dec 2012               | 1             | 144.290                                    | Y                |                  |                |
| †Antenna Equipment Unit (AEU)   |             | 2012 | Raytheon / Woburn, MA                                      | SS / FFP                 | MDA, Huntsville, AL | Dec 2011   | Jun 2014               | 2             | 144.090                                    | Y                |                  |                |
| †Antenna Equipment Unit (AEU)   |             | 2013 | Raytheon / Woburn, MA                                      | SS / FFP                 | MDA, Huntsville, AL | Dec 2012   | Jun 2015               | 1             | 143.300                                    | Y                |                  |                |
| †Cooling Equipment Unit (CEU)   |             | 2010 | Raytheon / Woburn, MA                                      | SS / FFP                 | MDA, Huntsville, AL | Jun 2010   | Dec 2012               | 1             | 7.800                                      | Y                |                  |                |
| †Cooling Equipment Unit (CEU)   |             | 2012 | Raytheon / Woburn, MA                                      | SS / FFP                 | MDA, Huntsville, AL | Dec 2011   | Jun 2014               | 2             | 7.668                                      | Y                |                  |                |
| †Cooling Equipment Unit (CEU)   |             | 2013 | Raytheon / Woburn, MA                                      | SS / FFP                 | MDA, Huntsville, AL | Dec 2012   | Jun 2015               | 1             | 7.800                                      | Y                |                  |                |
| †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                |                  |                |
| †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                |                  |                |
| Remarks:  |             |      |  |                          |                     |            |                        |               |  |                  |                  |                |

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| Exhibit P-21, Budget Production Schedule: PB 2013 Missile Defense Agency        |              |      |                      |             |                               |                                 |                    |             |             |  |             |             |             |             |             |             |                  |             |             |  |             |             | Date: February 2012 |             |             |                    |             |             |             |             |  |  |  |             |
|---|--------------|------|----------------------|-------------|-------------------------------|---------------------------------|--------------------|-------------|-------------|--|-------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|--|-------------|-------------|---------------------|-------------|-------------|--------------------|-------------|-------------|-------------|-------------|--|--|--|-------------|
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17 |              |      |                      |             |                               |                                 |                    |             |             | P-1 Line Item Nomenclature:<br>MD11 - BMDS AN/TPY-2 Radars |             |             |             |             |             |             |                  |             |             | Item Nomenclature:<br>BMDS AN/TPY-2 Radars |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
| COST ELEMENTS<br>Units in Each  |              |      |                      |             |                               |                                 | Fiscal Year 2013   |             |             |  |             |             |             |             |             |             | Fiscal Year 2014 |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
| O<br>C<br>O   | MFR<br>Ref # | FY   | SERVICE <sup>±</sup> | PROC<br>QTY | ACCEP<br>PRIOR<br>TO 1<br>OCT | BAL<br>DUE<br>AS<br>OF 1<br>OCT | Calendar Year 2013 |             |             |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             | Calendar Year 2014 |             |             |             |             |  |  |  | B<br>A<br>L |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T        | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N  | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V                                | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B         | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y        | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P |  |  |  |             |
| Antenna Equipment Unit (AEU)  |              |      |                      |             |                               |                                 |                    |             |             |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 1            | 2010 | MDA                  | 1           | 0                             | 1                               | -                  | -           | 1           |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 2            | 2012 | MDA                  | 2           | 0                             | 2                               | -                  | -           | -           | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | 2           |             |             |             |  |  |  |             |
|   | 3            | 2013 | MDA                  | 1           | 0                             | 1                               | -                  | -           | A -         | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | -           | -           | -           | 1           |  |  |  |             |
| Cooling Equipment Unit (CEU)  |              |      |                      |             |                               |                                 |                    |             |             |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 4            | 2010 | MDA                  | 1           | 0                             | 1                               | -                  | -           | 1           |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 5            | 2012 | MDA                  | 2           | 0                             | 2                               | -                  | -           | -           | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | 2           |             |             |             |  |  |  |             |
|   | 6            | 2013 | MDA                  | 1           | 0                             | 1                               | -                  | -           | A -         | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | -           | -           | -           | 1           |  |  |  |             |
| Electronic Equipment Unit (EEU)   |              |      |                      |             |                               |                                 |                    |             |             |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 7            | 2010 | MDA                  | 1           | 0                             | 1                               | -                  | -           | 1           |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 8            | 2012 | MDA                  | 2           | 0                             | 2                               | -                  | -           | -           | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | 2           |             |             |             |  |  |  |             |
|   | 9            | 2013 | MDA                  | 1           | 0                             | 1                               | -                  | -           | A -         | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | -           | -           | -           | 1           |  |  |  |             |
| Forward-Based Mode Prime Power Units (PPU)                                      |              |      |                      |             |                               |                                 |                    |             |             |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 10           | 2013 | MDA                  | 3           | 0                             | 3                               | -                  | -           | A -         | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | -           | -           | -           | 3           |  |  |  |             |
| Prime Power Unit (PPUs - 2 each radar system)                                   |              |      |                      |             |                               |                                 |                    |             |             |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 11           | 2010 | MDA                  | 1           | 0                             | 1                               | -                  | -           | 1           |  |             |             |             |             |             |             |                  |             |             |  |             |             |                     |             |             |                    |             |             |             |             |  |  |  |             |
|   | 12           | 2012 | MDA                  | 2           | 0                             | 2                               | -                  | -           | -           | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | 2           |             |             |             |  |  |  |             |
|   | 13           | 2013 | MDA                  | 1           | 0                             | 1                               | -                  | -           | A -         | -  | -           | -           | -           | -           | -           | -           | -                | -           | -           | -  | -           | -           | -                   | -           | -           | -                  | -           | -           | -           | 1           |  |  |  |             |
|   |              |      |                      |             |                               |                                 | O<br>C<br>T        | N<br>O<br>V | D<br>E<br>C | J<br>A<br>N  | F<br>E<br>B | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G      | S<br>E<br>P | O<br>C<br>T | N<br>O<br>V                                | D<br>E<br>C | J<br>A<br>N | F<br>E<br>B         | M<br>A<br>R | A<br>P<br>R | M<br>A<br>Y        | J<br>U<br>N | J<br>U<br>L | A<br>U<br>G | S<br>E<br>P |  |  |  |             |

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|--|----------------------|-----------|----------------------------|---------------------|---|--|---------------------------|----------------------|----------------------|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------------|----------------------|----------------------|---|----------------------|---------------------------|----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|
| <b>Exhibit P-21, Budget Production Schedule:</b> PB 2013 Missile Defense Agency        |                      |           |                            |                     |   |  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           | <b>Date:</b> February 2012 |                      |                      |                      |                      |                      |                      |                      |                      |  |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D / BA 1 / BSA 17 |                      |           |                            |                     |   |  |                           |                      |                      | <b>P-1 Line Item Nomenclature:</b><br>MD11 - BMDS AN/TPY-2 Radars |                      |                      |                      |                      |                      |                      |                         |                      |                      | <b>Item Nomenclature:</b><br>BMDS AN/TPY-2 Radars |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
| <b>COST ELEMENTS</b><br>Units in Each  |                      |           |                            |                     |   |  | <b>Fiscal Year 2015</b>   |                      |                      |   |                      |                      |                      |                      |                      |                      | <b>Fiscal Year 2016</b> |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
| <b>O<br/>C<br/>O</b>   | <b>MFR<br/>Ref #</b> | <b>FY</b> | <b>SERVICE<sup>±</sup></b> | <b>PROC<br/>QTY</b> | <b>ACCEP<br/>PRIOR<br/>TO 1<br/>OCT</b> | <b>BAL<br/>DUE<br/>AS<br/>OF 1<br/>OCT</b> | <b>Calendar Year 2015</b> |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      | <b>Calendar Year 2016</b> |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  |                      |           |                            |                     |   |  | <b>O<br/>C<br/>T</b>      | <b>N<br/>O<br/>V</b> | <b>D<br/>E<br/>C</b> | <b>J<br/>A<br/>N</b>  | <b>F<br/>E<br/>B</b> | <b>M<br/>A<br/>R</b> | <b>A<br/>P<br/>R</b> | <b>M<br/>A<br/>Y</b> | <b>J<br/>U<br/>N</b> | <b>J<br/>U<br/>L</b> | <b>A<br/>U<br/>G</b>    | <b>S<br/>E<br/>P</b> | <b>O<br/>C<br/>T</b> | <b>N<br/>O<br/>V</b>                              | <b>D<br/>E<br/>C</b> | <b>J<br/>A<br/>N</b>      | <b>F<br/>E<br/>B</b>       | <b>M<br/>A<br/>R</b> | <b>A<br/>P<br/>R</b> | <b>M<br/>A<br/>Y</b> | <b>J<br/>U<br/>N</b> | <b>J<br/>U<br/>L</b> | <b>A<br/>U<br/>G</b> | <b>S<br/>E<br/>P</b> | <b>B<br/>A<br/>L</b> |  |
| Antenna Equipment Unit (AEU)   |                      |           |                            |                     |   |  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 1                    | 2010      | MDA                        | 1                   | 1                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 2                    | 2012      | MDA                        | 2                   | 2                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 3                    | 2013      | MDA                        | 1                   | 0                                       | 1  | -                         | -                    | -                    | -   | -                    | -                    | -                    | -                    | -                    | 1                    |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
| Cooling Equipment Unit (CEU)   |                      |           |                            |                     |   |  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 4                    | 2010      | MDA                        | 1                   | 1                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 5                    | 2012      | MDA                        | 2                   | 2                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 6                    | 2013      | MDA                        | 1                   | 0                                       | 1  | -                         | -                    | -                    | -   | -                    | -                    | -                    | -                    | -                    | 1                    |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
| Electronic Equipment Unit (EEU)  |                      |           |                            |                     |   |  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 7                    | 2010      | MDA                        | 1                   | 1                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 8                    | 2012      | MDA                        | 2                   | 2                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 9                    | 2013      | MDA                        | 1                   | 0                                       | 1  | -                         | -                    | -                    | -   | -                    | -                    | -                    | -                    | -                    | 1                    |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
| Forward-Based Mode Prime Power Units (PPU)   |                      |           |                            |                     |   |  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 10                   | 2013      | MDA                        | 3                   | 0                                       | 3  | -                         | -                    | 3                    |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
| Prime Power Unit (PPUs - 2 each radar system)  |                      |           |                            |                     |   |  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 11                   | 2010      | MDA                        | 1                   | 1                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 12                   | 2012      | MDA                        | 2                   | 2                                       | 0  |                           |                      |                      |   |                      |                      |                      |                      |                      |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  | 13                   | 2013      | MDA                        | 1                   | 0                                       | 1  | -                         | -                    | -                    | -   | -                    | -                    | -                    | -                    | 1                    |                      |                         |                      |                      |   |                      |                           |                            |                      |                      |                      |                      |                      |                      |                      |                      |  |
|  |                      |           |                            |                     |   |  | <b>O<br/>C<br/>T</b>      | <b>N<br/>O<br/>V</b> | <b>D<br/>E<br/>C</b> | <b>J<br/>A<br/>N</b>  | <b>F<br/>E<br/>B</b> | <b>M<br/>A<br/>R</b> | <b>A<br/>P<br/>R</b> | <b>M<br/>A<br/>Y</b> | <b>J<br/>U<br/>N</b> | <b>J<br/>U<br/>L</b> | <b>A<br/>U<br/>G</b>    | <b>S<br/>E<br/>P</b> | <b>O<br/>C<br/>T</b> | <b>N<br/>O<br/>V</b>                              | <b>D<br/>E<br/>C</b> | <b>J<br/>A<br/>N</b>      | <b>F<br/>E<br/>B</b>       | <b>M<br/>A<br/>R</b> | <b>A<br/>P<br/>R</b> | <b>M<br/>A<br/>Y</b> | <b>J<br/>U<br/>N</b> | <b>J<br/>U<br/>L</b> | <b>A<br/>U<br/>G</b> | <b>S<br/>E<br/>P</b> |                      |  |



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| <b>Exhibit P-21, Budget Production Schedule:</b> PB 2013 Missile Defense Agency        |  |   | <b>Date:</b> February 2012                        |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D / BA 1 / BSA 17 |  | <b>P-1 Line Item Nomenclature:</b><br>MD11 - BMDS AN/TPY-2 Radars | <b>Item Nomenclature:</b><br>BMDS AN/TPY-2 Radars |

|           |                       | PRODUCTION RATES (Units/Year) |       |     | PROCUREMENT LEADTIME (Months) |                 |         |                   |                    |                 |         |                   |
|-----------|-----------------------|-------------------------------|-------|-----|-------------------------------|-----------------|---------|-------------------|--------------------|-----------------|---------|-------------------|
| MFR Ref # | MFR Name - Location   | MSR                           | 1-8-5 | MAX | Initial                       |                 |         |                   | Reorder            |                 |         |                   |
|           |                       |                               |       |     | ALT Prior to Oct 1            | ALT After Oct 1 | Mfg PLT | Total After Oct 1 | ALT Prior to Oct 1 | ALT After Oct 1 | Mfg PLT | Total After Oct 1 |
| 1         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 2         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 3         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 4         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 5         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 6         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 7         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 8         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 9         | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 10        | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 11        | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 12        | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |
| 13        | Raytheon - Woburn, MA | 1                             | 1     | 4   | 4                             | 2               | 30      | 32                | 0                  | 0               | 0       | 0                 |

**Remarks:**

‡ Delivery rows marked with the ‡ symbol indicate that they are funded through a separate Line Item. Additionally, deliveries for such components are not shown in this exhibit if they occur after the last delivery for the budgeting component. See the respective components' exhibits for details, including the full delivery schedule.

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| <b>Exhibit P-40, Budget Item Justification Sheet:</b> PB 2013 Missile Defense Agency   |  |                    |  |                |                     |                    |                      |                |   | <b>Date:</b> February 2012                                |                |                    |              |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency |  |                    |  |                |                     |                    |                      |                |   | <b>P-1 Line Item Nomenclature:</b><br>MD77 - Radar Spares |                |                    |              |
| <b>ID Code</b> (A=Service Ready, B=Not Service Ready) : B  |  |                    | <b>Program Elements for Code B Items:</b> 0603884C |                |                     |                    |                      |                | <b>Other Related Program Elements:</b> 0603884C |   |                |                    |              |
| <b>Resource Summary</b>  |  | <b>Prior Years</b> | <b>FY 2011</b>                                     | <b>FY 2012</b> | <b>FY 2013 Base</b> | <b>FY 2013 OCO</b> | <b>FY 2013 Total</b> | <b>FY 2014</b> | <b>FY 2015</b>                                  | <b>FY 2016</b>  | <b>FY 2017</b> | <b>To Complete</b> | <b>Total</b> |
| Procurement Quantity (Each)  |  | -                  | -  | -              | -                   | -                  | -                    | -              | -   | -   | -              | -                  | -            |
| Gross/Weapon System Cost (\$ in Millions)  |  | 0.000              | 0.000  | 0.000          | 10.177              | 0.000              | 10.177               | 0.000          | 0.000   | 0.000   | 0.000          | 0.000              | 10.177       |
| Less PY Advance Procurement (\$ in Millions)   |  | -                  | -  | -              | -                   | -                  | -                    | -              | -   | -   | -              | -                  | -            |
| Net Procurement (P1) (\$ in Millions)  |  | 0.000              | 0.000  | 0.000          | 10.177              | 0.000              | 10.177               | 0.000          | 0.000   | 0.000   | 0.000          | 0.000              | 10.177       |
| Plus CY Advance Procurement (\$ in Millions)   |  | -                  | -  | -              | -                   | -                  | -                    | -              | -   | -   | -              | -                  | -            |
| Total Obligation Authority (\$ in Millions)  |  | 0.000              | 0.000  | 0.000          | 10.177              | 0.000              | 10.177               | 0.000          | 0.000   | 0.000   | 0.000          | 0.000              | 10.177       |
| <i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>                                  |  |                    |  |                |                     |                    |                      |                |   |   |                |                    |              |
| Initial Spares (\$ in Millions)  |  | 0.000              | 0.000  | 0.000          | 10.177              | 0.000              | 10.177               | 0.000          | 0.000   | 0.000   | 0.000          | 0.000              | 10.177       |
| Flyaway Unit Cost (\$ in Millions)   |  | -                  | -  | -              | -                   | -                  | -                    | -              | -   | -   | -              | -                  | -            |
| Gross/Weapon System Unit Cost (\$ in Millions)   |  | -                  | -  | -              | -                   | -                  | -                    | -              | -   | -   | -              | -                  | -            |
| <b>Description:</b><br>Procure initial spares for AN/TPY-2 BMDS radars.  |  |                    |  |                |                     |                    |                      |                |   |   |                |                    |              |

  

| Item Schedule                         |          | ID<br>CD | Prior Years         |               |                      | FY 2011             |               |                      | FY 2012             |               |                      | FY 2013 Base        |               |                      | FY 2013 OCO         |               |                      | FY 2013 Total       |               |                      |
|---------------------------------------|----------|----------|---------------------|---------------|----------------------|---------------------|---------------|----------------------|---------------------|---------------|----------------------|---------------------|---------------|----------------------|---------------------|---------------|----------------------|---------------------|---------------|----------------------|
| Item Nomenclature*                    | Exhibits |          | Unit Cost<br>(\$ M) | Qty<br>(Each) | Total Cost<br>(\$ M) | Unit Cost<br>(\$ M) | Qty<br>(Each) | Total Cost<br>(\$ M) | Unit Cost<br>(\$ M) | Qty<br>(Each) | Total Cost<br>(\$ M) | Unit Cost<br>(\$ M) | Qty<br>(Each) | Total Cost<br>(\$ M) | Unit Cost<br>(\$ M) | Qty<br>(Each) | Total Cost<br>(\$ M) | Unit Cost<br>(\$ M) | Qty<br>(Each) | Total Cost<br>(\$ M) |
| Initial Spares                        | P18      |          | -                   | -             | 0.000                | -                   | -             | 0.000                | -                   | -             | 0.000                | -                   | -             | 10.177               | -                   | -             | 0.000                | -                   | -             | 10.177               |
| <b>Total Gross/Weapon System Cost</b> |          |          |                     |               | <b>0.000</b>         |                     |               | <b>0.000</b>         |                     |               | <b>0.000</b>         |                     |               | <b>10.177</b>        |                     |               | <b>0.000</b>         |                     |               | <b>10.177</b>        |

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

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| <b>Justification:</b><br>FY 2013: Initial spares for one AN/TPY-2 BMDS radar. |  |
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| <b>Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification:</b> PB 2013 Missile Defense Agency |                                      |   |                                  |                                       | <b>Date:</b> February 2012                         |  |
| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D / BA 1 / BSA 17                              |                                      | <b>P-1 Line Item Nomenclature:</b><br>MD77 - Radar Spares |                                  |                                       | <b>Item Nomenclature (Name):</b><br>Initial Spares |  |
| <b>End Item - Line Item Number and Name</b>   | <b>Prior Years</b><br><i>(\$ M )</i> | <b>FY 2011</b><br><i>(\$ M )</i>                          | <b>FY 2012</b><br><i>(\$ M )</i> | <b>FY 2013 Base</b><br><i>(\$ M )</i> | <b>FY 2013 OCO</b><br><i>(\$ M )</i>               | <b>FY 2013 Total</b><br><i>(\$ M )</i> |
| <b>Initial</b>  |                                      |   |                                  |                                       |  |  |
| BA 1 - Major Equipment  |                                      |   |                                  |                                       |  |  |
| 1 - Initial Spares  | 0.000                                | 0.000   | 0.000                            | 10.177                                | 0.000  | 10.177                                 |
| <i>Total Initial</i>  | <i>0.000</i>                         | <i>0.000</i>  | <i>0.000</i>                     | <i>10.177</i>                         | <i>0.000</i>                                       | <i>10.177</i>                          |
| <b>Total Cost</b> (Initial + Replenishment)   | <b>0.000</b>                         | <b>0.000</b>  | <b>0.000</b>                     | <b>10.177</b>                         | <b>0.000</b>                                       | <b>10.177</b>                          |
| <b>Remarks:</b><br>Procure initial spares for one AN/TPY-2 BMDS radar.  |                                      |   |                                  |                                       |  |  |

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**Exhibit P-40, Budget Item Justification Sheet:** PB 2013 Missile Defense Agency **Date:** February 2012

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| <b>Appropriation / Budget Activity / Budget Sub Activity:</b><br>0300D : Procurement, Defense-Wide / BA 1 : Major Equipment / BSA 17 : Major Equipment, Missile Defense Agency | <b>P-1 Line Item Nomenclature:</b><br>MD83 - Iron Dome |
|--|--|

| ID Code (A=Service Ready, B=Not Service Ready) : A  | Program Elements for Code B Items: |         |         |              |             |               | Other Related Program Elements: |         |         |         |             |         |
|---|------------------------------------|---------|---------|--------------|-------------|---------------|---------------------------------|---------|---------|---------|-------------|---------|
| Resource Summary  | Prior Years                        | FY 2011 | FY 2012 | FY 2013 Base | FY 2013 OCO | FY 2013 Total | FY 2014                         | FY 2015 | FY 2016 | FY 2017 | To Complete | Total   |
| Procurement Quantity (Each)   | 0                                  | 1       | 0       | 0            | 0           | 0             | 0                               | 0       | 0       | 0       | 0           | 1       |
| Gross/Weapon System Cost (\$ in Millions)   | 0.000                              | 203.868 | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 203.868 |
| Less PY Advance Procurement (\$ in Millions)  | 0.000                              | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 0.000   |
| Net Procurement (P1) (\$ in Millions)   | 0.000                              | 203.868 | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 203.868 |
| Plus CY Advance Procurement (\$ in Millions)  | 0.000                              | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 0.000   |
| Total Obligation Authority (\$ in Millions)   | 0.000                              | 203.868 | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 203.868 |
| <i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i> |                                    |         |         |              |             |               |                                 |         |         |         |             |         |
| Initial Spares (\$ in Millions)   | 0.000                              | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 0.000   |
| Flyaway Unit Cost (\$ in Millions)  | 0.000                              | 0.000   | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 0.000   |
| Gross/Weapon System Unit Cost (\$ in Millions)  | 0.000                              | 203.868 | 0.000   | 0.000        | 0.000       | 0.000         | 0.000                           | 0.000   | 0.000   | 0.000   | 0.000       | 203.868 |

**Description:**

Provides funding to the Government of Israel to procure the Iron Dome defense system to counter short-range rocket threats (112 H.R. 1473 DOD Appropriations Act.)

| Item Schedule                         |          | ID CD | Prior Years      |            |                   | FY 2011          |            |                   | FY 2012          |            |                   | FY 2013 Base     |            |                   | FY 2013 OCO      |            |                   | FY 2013 Total    |            |                   |
|---------------------------------------|----------|-------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|------------------|------------|-------------------|
| Item Nomenclature*                    | Exhibits |       | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Qty (Each) | Total Cost (\$ M) |
| Iron Dome                             | P5       | A     | 0.000            | 0          | 0.000             | 203.868          | 1          | 203.868           | 0.000            | 0          | 0.000             | 0.000            | 0          | 0.000             | 0.000            | 0          | 0.000             | 0.000            | 0          | 0.000             |
| <b>Total Gross/Weapon System Cost</b> |          |       |                  |            | <b>0.000</b>      |                  |            | <b>203.868</b>    |                  |            | <b>0.000</b>      |                  |            | <b>0.000</b>      |                  |            | <b>0.000</b>      |                  |            | <b>0.000</b>      |

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

**Justification:**

FY 2011: Procurement for four batteries of the Iron Dome defense system.

**UNCLASSIFIED**

|   |  |       |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |                   |  |  |
|---|--|-------|------------------|-----------------|-------------------|------------------|-----------------|---|------------------|-----------------|-------------------|------------------|-----------------|---|------------------|-----------------|-------------------|------------------|-----------------|-------------------|--|--|
| Exhibit P-5, Cost Analysis: PB 2013 Missile Defense Agency  |  |       |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 | Date: February 2012   |                  |                 |                   |                  |                 |                   |  |  |
| Appropriation / Budget Activity / Budget Sub Activity:<br>0300D / BA 1 / BSA 17   |  |       |                  |                 | MDAP Code:<br>362 |                  |                 | P-1 Line Item Nomenclature:<br>MD83 - Iron Dome |                  |                 |                   |                  |                 | Item Nomenclature (Item Number, Item Name, DODIC):<br>Iron Dome |                  |                 |                   |                  |                 |                   |  |  |
| Resource Summary  |  |       |                  |                 | Prior Years       |                  |                 | FY 2011   |                  |                 | FY 2012           |                  |                 | FY 2013 Base  |                  |                 | FY 2013 OCO       |                  |                 | FY 2013 Total     |  |  |
| Procurement Quantity (Each)   |  |       |                  |                 | 0                 |                  |                 | 1   |                  |                 | 0                 |                  |                 | 0   |                  |                 | 0                 |                  |                 | 0                 |  |  |
| Gross/Weapon System Cost (\$ in Millions)   |  |       |                  |                 | 0.000             |                  |                 | 203.868   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Less PY Advance Procurement (\$ in Millions)  |  |       |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Net Procurement (P1) (\$ in Millions)   |  |       |                  |                 | 0.000             |                  |                 | 203.868   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Plus CY Advance Procurement (\$ in Millions)  |  |       |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Total Obligation Authority (\$ in Millions)   |  |       |                  |                 | 0.000             |                  |                 | 203.868   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)  |  |       |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |                   |  |  |
| Initial Spares (\$ in Millions)   |  |       |                  |                 | -                 |                  |                 | -   |                  |                 | -                 |                  |                 | -   |                  |                 | -                 |                  |                 | -                 |  |  |
| Gross/Weapon System Unit Cost (\$ in Millions)  |  |       |                  |                 | 0.000             |                  |                 | 203.868   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Cost Elements<br>(† indicates the presence of a P-5A)   |  | ID CD | Prior Years      |                 |                   | FY 2011          |                 |   | FY 2012          |                 |                   | FY 2013 Base     |                 |   | FY 2013 OCO      |                 |                   | FY 2013 Total    |                 |                   |  |  |
|   |  |       | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M)                               | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M)   | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) | Unit Cost (\$ M) | Quantity (Each) | Total Cost (\$ M) |  |  |
| Hardware Cost   |  |       |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |                   |  |  |
| Non Recurring Cost  |  |       |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |                   |  |  |
| Iron Dome   |  | A     | 0.000            | 0               | 0.000             | 203.868          | 1               | 203.868   | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000   | 0.000            | 0               | 0.000             | 0.000            | 0               | 0.000             |  |  |
| Total Non Recurring Cost  |  |       |                  |                 | 0.000             |                  |                 | 203.868   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Total Hardware Cost   |  |       |                  |                 | 0.000             |                  |                 | 203.868   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Gross Weapon System Cost  |  |       |                  |                 | 0.000             |                  |                 | 203.868   |                  |                 | 0.000             |                  |                 | 0.000   |                  |                 | 0.000             |                  |                 | 0.000             |  |  |
| Remarks:<br>Provides funding to the Government of Israel to procure the Iron Dome defense system to counter short-range rocket threats (112 H.R. 1473 DOD Appropriations Act). FY 2011 procurement of four batteries of the Iron Dome defense system. |  |       |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |   |                  |                 |                   |                  |                 |                   |  |  |