# BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

| COST (*In Thousands*) | FY2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY2007 Estimate | Cost to Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| Total Program Element (PE) Cost | 530432 | 866530 | 934681 | 714679 | 830204 | 920988 | 1131109 | Continuing | Continuing |
| 2011 Theater High Altitude Area Defense (THAAD) | 0 | 852592 | 934681 | 714679 | 830204 | 920988 | 1131109 | Continuing | Continuing |
| 2260 Theater High Altitude Area Defense (THAAD) | 530432 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2090 Program Operations | 0 | 13938 | 0 | 0 | 0 | 0 | 0 | Continuing | Continuing |

**NOTE: This Program Element (PE) does not match the earlier R-1 submission. There was a net zero sum transfer of funds between Ground Base Misdcourse, PE 0603882C, Project 3012, -$2.510K and THAAD, PE 0604861C, Project 2011, +$2.510K.**

**A. Mission Description and Budget Item Justification**

The THAAD program was restructured from project 2260 in FY 2001 to project 2011 in FY 2002 – FY 2007.

The mission of the Theater High Altitude Area Defense (THAAD) system is to defend against short and medium range Ballistic Missiles (BMs) and other near-term threats from long range and endo- and exo-atmospheric altitudes. THAAD is an element of the Terminal Defense System (TDS). The MDA Director approves the TDS capability-based development and selective upgrades of defensive capabilities that engage and negate ballistic missiles in the terminal phase of their trajectory. THAAD's long-range capability will protect U. S. and allied armed forces, broadly dispersed assets and population centers against BM attacks. THAAD's capability to intercept at endo- and exo-atmospheric altitudes makes effective countermeasures to THAAD difficult, allows multiple intercept opportunities, and will significantly mitigate the effects of weapons of mass destruction. The THAAD element development phase will refine and mature the system design to ensure component and system performance, producibility, and supportability. The THAAD program is employing a low-risk spiral development approach. Five major components (missiles, launchers, radar(s), Battle Management/Command and Control ($BM/C^2$), and THAAD-specific support equipment) will be integrated into the THAAD element and BMDS. The flow down of BMD System capability specifications resulting from Missile Defense National Team efforts in $BM/C^2$ and Systems Engineering & Integration will guide the integration of THAAD into the BMD System, the BMDS $BM/C^2$ architecture, and the Ballistic Missile Defense (BMD) Test Bed.

Program operations funding includes the required personnel and management support. This infrastructure includes items such as: travel; personnel and related facility support costs; statutory and fiscal requirements, and support service contracts.

# BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

| B. Program Change Summary | FY 2001 | FY 2002 | FY 2003 |
|---|---|---|---|
| Previous President's Budget (FY 2002 APB) | 549945 | | 762191* |
| Appropriated Value | | 872481 | |
| BMDO Adjustments | -5025 | | |
| Adjustments to Appropriated Value | -14488 | | |
| a. Congressional General Reductions | | -5951 | |
| b. SBIR / STTR | | | |
| c. Omnibus or Other Above Threshold Reductions | | | |
| d. Below Threshold Reprogramming | | | |
| e. Rescissions | | | |
| Adjustments to Budget Years Since FY 2002 APB | -19513 | | 172490** |
| Fiscal Year (FY) 2003 Budget Estimate | 530432 | 866530 | 934681 |

Change Summary Explanation:
FY2001 (-7447): Congressional general reductions.
(-1500): SIAP Reprogramming.

FY 2002 Congressional reductions of -5951.

* FY 2003 Previous Administration's President's Budget.
**This program was restructured starting in FY 2002.

| BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | DATE February 2002 |
|---|---|
| BUDGET ACTIVITY<br>5 - Engineering and Manufacturing Development | PE NUMBER AND TITLE<br>0604861C THAAD System<br>PROJECT<br>2011 |

| COST (*In Thousands*) | FY2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY2007 Estimate | Cost to Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| 2011 Theater High Altitude Area Defense (THAAD) | 0 | 852592 | 934681 | 714679 | 830204 | 920988 | 1131109 | Continuing | Continuing |

**See R-2 Note**

**A. Mission Description and Budget Item Justification**

The Theater High Altitude Area Defense (THAAD) is an element of the Terminal Defense Segment (TDS) of the Ballistic Missile Defense System (BMDS). TDS allocates resources to support development and selective upgrades of defensive capabilities that engage and negate ballistic missiles in the terminal phase of their trajectory. The mission of the THAAD system is to defend against short and medium range Ballistic Missiles (BMs) and other near-term threats from long range and endo- and exo-atmospheric altitudes. THAAD's long-range capability will protect U. S. and allied armed forces, broadly dispersed assets and population centers against BM attacks. THAAD's capability to intercept at endo- and exo-atmospheric altitudes makes effective countermeasures to THAAD difficult, allows multiple intercept opportunities, and will significantly mitigate the effects of weapons of mass destruction. The THAAD element development phase will refine and mature the system design to ensure component and system performance, producibility, and supportability. The THAAD program is employing a low-risk spiral development approach. Five major components (missiles, launchers, radar(s), Battle Management/Command and Control ($BM/C^2$), and THAAD-specific support equipment) will be integrated into the THAAD element and BMDS. Additionally, the program will investigate the integration of THAAD into the BMDS, BMDS Command and Control Elements, and the BMD Test Bed (BTB). THAAD will follow the Missile Defense Agency's capability-based acquisition strategy that emphasizes testing, spiral development, and evolutionary acquisition through the use of two-year capability blocks.

Block 2004 THAAD Technical and schedule risk reduction through early component deliveries, system integration and verification in Hardware-In-The-Loop testing and additional flight testing. Early component deliveries include $BM/C^2$ and radar software development, first and second radars, missile sub-assembly development, integration and testing. Block 2004 provides the opportunity to decide whether to continue acquisition of test assets that could be available for a limited contingency capability.

Block 2006 THAAD Block 2006 represents the earliest opportunity for THAAD to transition to initial production. A single firing unit (one radar, $BM/C^2$, launcher and missiles) will be available that will have the capability to defeat short and medium range ballistic missiles and other near-term threats. Flight testing, production qualification and initial operational testing of all THAAD system components will be successfully completed and all production facilities capabilities will be verified.

Block 2008, 2010, and 2012 THAAD Represents the incremental capability delivered as part of THAAD's evolutionary acquisition/development strategy. These blocks build on the core, near-term missile defense capability provided by THAAD Block 2006. These blocks expand the capabilities of the THAAD system to address longer range and more advanced threats. These blocks will implement multiple battery and highly integrated BMDS engagement operations; additionally, upgraded missile and radar software will specifically enhance the system's performance in the presence of sophisticated countermeasures.

| BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | | DATE February 2002 |
|---|---|---|
| BUDGET ACTIVITY<br>5 - Engineering and Manufacturing Development | PE NUMBER AND TITLE<br>0604861C THAAD System | PROJECT<br>2011 |

**FY 2001 Accomplishments:** Funding for this project exists and is in Project 2260, Program Element 0604861C

**FY 2002 Planned Program:**

- **Ground Based Projects Block 2004 THAAD**
- 160000 Initiate technical and schedule risk reduction efforts to establish early Hardware-In-The-Loop facilities, initiate early component deliveries and prepare for additional flight testing. Early component fabrication, including initiating earlier BM/$C^2$ and radar software development, first and second radars hardware fabrication, and missile sub-assembly development, integration, and testing.
- **Ground Based Projects Block 2006 THAAD**
- 617309 Continue missile, radar, BM/$C^2$, and launcher hardware and software development. Conduct missile, launcher, and system Preliminary Design Reviews (PDRs). Conduct BM/$C^2$ and launcher Critical Design Reviews (CDRs). Begin first developmental radar and battle manager fabrication. Initiate prototype and brassboard missile component testing. Continue missile risk reduction testing.
- 36520 Support Contracts: Continue software independent verification and validation. Continue development of Simulation-Over-Live-Driver (SOLD). Perform technical analysis support.
- 14540 Other Government Agencies (OGAs), Government Furnished Equipment (GFE)/other: Continue system Hardware-In-The-Loop development efforts. Continue BM/$C^2$ interoperability and simulation efforts. Continue threat vulnerability assessment. Maintain integrated logistics and product assurance efforts. Perform quality and manufacturing technology tasks. Continue MIT/LL efforts.
- 20028 In-house support: Fund government salaries, benefits, travel, and training (includes MITRE).
- 1064 Test Planning: Initiate integration into White Sands Missile Range (WSMR) and the BMD Test Bed.
- 3131 Lethality: Conduct lethality planning and model design.

Total 852592

**FY 2003 Planned Program:**

- **Ground Based Projects Block 2004 THAAD**
- 175000 Continue early establishment of system Hardware-In-The-Loop capability and missile, radar, launcher and BM/$C^2$ component hardware and software development for early verification of system integration. Continue earlier fabrication of radars #1 and #2 to support additional ground and flight testing in FY 2005 and FY 2006.
- **Ground Based Projects Block 2006 THAAD**

| BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | DATE February 2002 |
|---|---|
| BUDGET ACTIVITY<br>5 - Engineering and Manufacturing Development | PE NUMBER AND TITLE<br>0604861C THAAD System<br>PROJECT 2011 |

| | | |
|---|---|---|
| • | 662329 | Continue missile, radar, BM/$C^2$, and launcher hardware and software development. Conduct missile and launcher CDRs and initiate fabrication of launcher and missile ground test units. Support range activation and operation activities at WSMR and the BMD Test Bed (BTB) at the Pacific Missile Range Facility (PMRF). Continue system integration into BTB. Continue fabrication of EMD Radar #2. Continue launcher and battle manager test beds. Complete assembly of radar antenna #1 and begin calibration and testing. |
| • | 47000 | Support Contracts: Continue software independent verification and validation. Continue development of simulation-over-live-driver. Perform technical analysis support. |
| • | 19132 | Other Government Agencies (OGAs), Government Furnished Equipment (GFE)/other: Initiate THAAD range operations at WSMR and BTB at PMRF and continue system Hardware-In-The-Loop development efforts. Continue BM/$C^2$ interoperability and simulation efforts. Continue threat vulnerability assessment. Maintain integrated logistics and product assurance efforts. Perform quality and manufacturing technology tasks. Prepare for soldier participation in early flight testing. |
| • | 20000 | In-house support: Fund government salaries, benefits, travel, and training (includes MITRE). |
| • | 6620 | Test Planning: Continue test planning for WSMR and BTB. |
| • | 4600 | Lethality: Conduct lethality simulation code validation and planning. Initiate lethality test article development. |
| • | | |
| Total | 934681 | |

# BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

PROJECT: 2011

| B. Other Program Funding Summary | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | To Compl | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| PE 0604861C | 530432 | | | | | | | | |
| PE 0603875C | 125805 | | | | | | | | |
| PE 0603880C | | 807993 | 1065982 | 1208546 | 1157025 | 1139885 | 1176979 | Cont | Cont |
| PE 0603881C | | 200119 | 169974 | 200171 | 234318 | 228443 | 367744 | Cont | Cont |
| PE 0603882C | | 3762250 | 3192594 | 3071581 | 3016343 | 2969142 | 2595708 | Cont | Cont |
| PE 0603883C | | 599835 | 796927 | 1389817 | 1399902 | 1591160 | 2274654 | Cont | Cont |
| PE 0603884C | | 335338 | 373447 | 489181 | 1145680 | 899806 | 1007660 | Cont | Cont |
| PE 0603175C | | 139340 | 121751 | 155056 | 130299 | 142785 | 147457 | Cont | Cont |
| PE 0604861C* | | 750 | 23400 | 12255 | 13390 | | | Cont | Cont |

*DD Form 1391s have been prepared for the THAAD associated BMDS Test Bed at PMRF and other THAAD MILCON budget items. These dollars are part of the overall THAAD budget and should be **added** to the dollars on page 1 to provide total budget required.

**C. Acquisition Strategy:** THAAD will follow the Missile Defense Agency's capability-based acquisition strategy that emphasizes testing, spiral development, and evolutionary acquisition through the use of two-year capability blocks.

| D. Schedule Profile | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 |
|---|---|---|---|---|---|---|---|
| Launcher PDR | | 3Q | | | | | |
| Missile PDR | | 3Q | | | | | |
| BM/C$^3$I CDR | | 3Q | | | | | |
| System PDR | | 4Q | | | | | |
| Launcher CDR | | | 2Q | | | | |
| Missile CDR | | | 3Q | | | | |
| System CDR | | | | 1Q | | | |
| Block 2004 Flight Tests Begin | | | | 4Q | | | |
| Earliest decision to initiate Block 2008 | | | | | 1Q | | |
| Radar 1 Integration &Test Complete | | | | | 2Q | | |
| Radar 2 Integration & Test Complete | | | | | 3Q | | |
| Award 14 Missile Option for Block 2006 for IOTE | | | | | 3Q | | |
| Block 2006 Production Qualification Test Ready | | | | | 3Q | | |

| BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | | | | | | DATE February 2002 | |
|---|---|---|---|---|---|---|---|
| BUDGET ACTIVITY<br>5 - Engineering and Manufacturing Development | | | PE NUMBER AND TITLE<br>0604861C THAAD System | | | | PROJECT<br>2011 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Block 2006 Production Readiness Review Assessment | | | | | 3Q | | |
| Block 2006 Flight Tests Begin | | | | | 4Q | | |
| Earliest opportunity for transition to Block 2006 production | | | | | | 1Q | |

# BMDO RDT&E COST ANALYSIS (R-3)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

PROJECT: 2011

| I. Product Development | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| **Block 2004/2006** | | | | | | | | | | |
| a. System Design | CPAF/FF | LMSSC, CA/AL | | 316000 | 1Q | 215000 | 1Q | Cont | 531000 | |
| b. Fabrication of missile components | CPAF/FF | LMSSC, CA | | 141000 | 1Q | 200000 | 1Q | Cont | 341000 | |
| c. Fabrication of radars | CPAF/FF | LM/Raytheon, MA | | 242000 | 1Q | 270000 | 1Q | Cont | 512000 | |
| d. Activation of ranges | CPAF/FF | LMSSC, CA/AL | | 16309 | 1Q | 21329 | 1Q | Cont | 37638 | |
| e. System integration/HWIL | CPAF/FF | LMSSC, CA/AL | | 27000 | 1Q | 40000 | 1Q | Cont | 67000 | |
| f. Fabricate ground assemblies/product lines | CPAF/FF | LMSSC, CA | | 35000 | 1Q | 51000 | 1Q | Cont | 86000 | |
| g. 10 addt'l test bed missiles | | | | | | 40000 | 1Q | Cont | 40000 | |
| Subtotal Product Development: | | | | 777309 | | 837329 | | | 1614638 | |

Remark: All of the effort above is part of the THAAD EMD contract with Lockheed Martin and their major subcontractor Raytheon. Line a: Completion of system design and component/sub-assembly testing (missile, launcher, radar, BMC2); Line b: Fabrication of missile sub-assemblies and test facilities to conduct intensive ground testing in FY04-FY05; Line c: Completion of Radar #1 in FY03 and continued radar #2 fabrication; Line d: Activation of two ranges for flight testing in FY04 and FY05 (Pacific Missile Range Facility and White Sands Missile Range); Line e: Complete system integration and analysis in Hardware-in-the-Loop; Line f: Fabrication of ground component hardware and establishment/verification of production lines to produce production representative hardware for ground and flight testing in FY04/05; Line g: 10 additional test bed missiles.

| II. Support Costs | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| a. Support Contractor | Various | Various | | 35920 | 1Q/2Q | 47000 | 1Q/2Q | Cont | 82920 | |
| b. OGAs | MIPR | Various | | 14540 | 1Q/2Q | 19132 | 1Q/2Q | Cont | 33672 | |
| c. In-house Support | Various | Various | | 17028 | 1Q/2Q | 17000 | 1Q/2Q | Cont | 34028 | |
| Subtotal Support Costs: | | | | 67488 | | 83132 | | Cont | 150620 | |

Remark:

# BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

PROJECT: 2011

| III. Test and Evaluation | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| a. Test Planning | MIPR | Various | | 1064 | 2Q | 6620 | 2Q | Cont | 7684 | |
| b. Lethality/LFT&E | Various | Various | | 3131 | 2Q | 4600 | 2Q | Cont | 7731 | |
| Subtotal Test and Evaluation: | | | | 4195 | | 11220 | | | 15415 | |

Remark:

| IV. Management Services | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| a. Support Contractor | MIPR/FFRDC | MIT/LL, Lexington, MA | | 600 | 2Q | | 2Q | Cont | 600 | |
| b. In-house Support | MIPR/FFRDC | Mitre, Ft. Monmouth, NJ | | 3000 | 2Q | 3000 | 2Q | Cont | 6000 | |
| Subtotal Management Services: | | | | 3600 | | 3000 | | | 6600 | |

Remark:

| Project Total Cost: | | | | 852592 | | 934681 | | | 1787273 | |
|---|---|---|---|---|---|---|---|---|---|---|

Remark:

| BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | DATE February 2002 |
|---|---|
| BUDGET ACTIVITY<br>5 - Engineering and Manufacturing Development | PE NUMBER AND TITLE<br>0604861C THAAD System<br>PROJECT<br>2260 |

| COST (*In Thousands*) | FY 2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | Cost to Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| 2260 Theater High Altitude Area Defense (THAAD) | 530432 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**A. Mission Description and Budget Item Justification**

The THAAD System Engineering and Manufacturing Development (EMD) phase will refine and mature the Program Definition and Risk Reduction (PDRR) system design to ensure component and system performance, producibility, and supportability. The mission of the THAAD System is to defend against short and medium range Theater Ballistic Missiles (TBMs) from long range and high altitudes. THAAD's long range capability will protect U. S. and allied Armed Forces, broadly dispersed assets and population centers against TBM attacks. THAAD's capability to intercept at high altitudes allows multiple intercept opportunities and will significantly mitigate the effects of weapons of mass destruction. The THAAD System consists of missiles, launchers, and radar(s), Battle Management/Command, Control, Communications, and Intelligence ($BM/C^3I$) units, and support equipment. THAAD will follow the Missile Defense Agency's capability-based acquisition strategy that emphasizes testing, spiral development, and evolutionary acquisition through the use of two-year capability blocks.

**FY 2001 Accomplishments:**

| | | |
|---|---|---|
| • | 434736 | Funded EMD contract with Lockheed. Continued hardware and software development for the missile, radar, launcher, and $BM/C^2$. Conducted $BM/C^2$ Preliminary Design Review. Conducted radar Critical Design Review. |
| • | 59299 | Support contracts and Other Government Agencies: continued support to include software independent verification and validation; technical analysis and evaluation; hardware-in-the-loop efforts; vulnerability assessment; logistics, product assurance, test, and manufacturing efforts; Government Furnished Equipment; Simulation-Over-Live-Driver (SOLD); and PEO support. |
| • | 18582 | In-house support to include government salaries and benefits, travel, training, equipment, and Automated Data Processing (ADP). |
| • | 17815 | BMDO support, Operational Test and Evaluation (OT&E) work. |
| Total | 530432 | |

**FY 2002 Planned Program:**

| | | |
|---|---|---|
| • | | The THAAD program is under project 2011 beginning in FY 2002. |
| Total | 0 | |

**FY 2003 Planned Program:**

| | | |
|---|---|---|
| • | | |
| Total | 0 | |

# BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

| B. Other Program Funding Summary | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | To Compl | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| PE 0604865C | 81892 | | | | | | | | |
| PE 0604867C | 267453 | | | | | | | | |

D. C. **Acquisition Strategy:** The EMD contract was a sole source award to the Dem/Val contractor team (as approved September 15, 1995 by Under Secretary of Defense for Acquisition, Technology, and Logistics utilizing the DoD Acquisition Streamlining approach) with Lockheed Martin Space Systems Company being the prime and Raytheon Company being the major subcontractor. The EMD contractor team will become the contractor team for the Low Rate Initial Production (LRIP) and Full Rate Production (FRP) phases. This single prime contractor will have total system performance responsibility for the EMD, LRIP, and FRP phases.

| D. Schedule Profile | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |

# BMDO RDT&E COST ANALYSIS (R-3)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

PROJECT: 2260

| I. Product Development | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| a. THAAD Project | CPAF/FF | LMSSC, Sunnyvale, CA & Huntsville, AL | 512263 | | | | | | 512263 | |
| Subtotal Product Development: | | | 512263 | | | | | | 512263 | |

Remark:

| II. Support Costs | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| a. SETA | Various | Huntsville, AL | 39814 | | | | | | 39814 | |
| b. OGAs | MIPR | Various | 16330 | | | | | | 16330 | |
| c. Program Mgmt | Various | Huntsville, AL | 17470 | | | | | | 17470 | |
| d. BMDO-Hercules | Various | Various | 9000 | | | | | | 9000 | |
| Subtotal Support Costs: | | | 82614 | | | | | | 82614 | |

Remark:

| III. Test and Evaluation | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| a. Test Planning | MPIR/Various | Various | 2560 | | | | | | 2560 | |
| b. OT&E | Various | Various | 1244 | | | | | | 1244 | |
| Subtotal Test and Evaluation: | | | 3804 | | | | | | 3804 | |

Remark:

| IV. Management Services | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2002 Cost | FY 2002 Award Date | FY 2003 Cost | FY 2003 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|
| a. MIT/LL | MIPR/FFRDC | Lexington, MA | 1200 | | | | | | 1200 | |
| b. Mitre | MIPR/FFRDE | Ft. Monmouth, NJ | 3067 | | | | | | 3067 | |
| c. BMDO-Test Support | Various | Various | 3750 | | | | | | 3750 | |

# BMDO RDT&E COST ANALYSIS (R-3)

DATE: February 2002

BUDGET ACTIVITY: 5 - Engineering and Manufacturing Development

PE NUMBER AND TITLE: 0604861C THAAD System

PROJECT: 2260

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| c. BMDO-Test Support Radar | Various | Various | 3750 | | | | | | 3750 | |
| Subtotal Management Services: | | | 8017 | | | | | | 8017 | |

Remark:

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Project Total Cost: | | | 606698 | | | | | | 606698 | |

Remark:

| BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | | | DATE February 2002 |
|---|---|---|---|
| BUDGET ACTIVITY<br>5 - Engineering and Manufacturing Development | PE NUMBER AND TITLE<br>0604861C THAAD System | | PROJECT<br>2090 |

| COST (*In Thousands*) | FY2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY2007 Estimate | Cost to Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| 2090 Program Operations | 0 | 13938 | 0 | 0 | 0 | 0 | 0 | Continuing | Continuing |

**A. Mission Description and Budget Item Justification**

This project covers personnel and related facility support costs, statutory and fiscal requirements, and support service contracts.

Personnel covers government civilians performing program-wide oversight functions such as financial management, contracting, security, information systems support, and legal services at Missile Defense Agency's (MDA's) Executing Agents within the US Army Space & Missile Defense Command, US Army PEO Air and Missile Defense, US Navy PEO for Theater Surface Combatants, US Air Force and the Joint National Integration Center. Related facility costs include rents, utilities, supplies, ADP equipment, and all the associated operation and maintenance activities.

Fiscal Requirements include reimbursable services acquired through the Defense Working Capital Fund (DWCF) such as accounting services provided by the Defense Finance and Accounting Services (DFAS); reserves for special termination costs on designated contracts; and provisions for terminating other programs as required. BMDO has additional requirements to provide for foreign currency fluctuations on its limited number of foreign contracts. Also includes funding for charges to canceled appropriations in accordance with Public Law 101-510.

Assistance required to support BMD program-wide management functions is also contained in this project. This assistance ranges from operational contracts to support functions such as ADP operations, Access control offices and graphics support, to efforts required to supplement MDA and Executing Agent government personnel. Typical efforts include cost estimating; security management; information management; technology integration across MDA projects; and assessment of schedule, cost and performance, with attendant documentation of the many related programmatic issues. The requirements for this area are based on most economical and efficient utilization of contractors versus government personnel.

**FY 2001 Accomplishments:**

- 

Total 0 Funding for this project exists and is provided under the Family of Systems project, Program Element 0603873C.

**FY 2002 Planned Program:**

- 13938 Provides management and support for overhead/indirect fixed costs such as civilian payroll, travel, rents & utilities, and supplies.

Total 13938

| BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit) | DATE February 2002 |
|---|---|

| BUDGET ACTIVITY | PE NUMBER AND TITLE | PROJECT |
|---|---|---|
| 5 - Engineering and Manufacturing Development | 0604861C THAAD System | 2090 |

**FY 2003 Planned Program:**

- 0 Fiscal Year 2003 through 2007 funding is provided under project 2090 in the Terminal Defense Segment, Program Element 0603881C.

Total 0

| B. Other Program Funding Summary | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | To Compl | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| N/A | | | | | | | | | |
| | | | | | | | | | |

**C. Acquisition Strategy:**

N/A

| D. Schedule Profile | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 |
|---|---|---|---|---|---|---|---|
| N/A | | | | | | | |
| | | | | | | | |