CLASSIFICATION: Unclassified

| EXHIBIT R-2, RDT&E Budget Item Justification | | | | | | DATE: | | |
|---|-------------|----------------|-----------------|----------------|---------|---------|---------------|--------|
| - | | | | | | | February 2005 | |
| APPROPRIATION/BUDGET ACTIVITY | | | | R-1 ITEM NOMEN | CLATURE | | | |
| RESEARCH DEVELOPMENT TEST & EVALUAT | ION, NAVY / | 0604366N/STAND | ARD MISSILE IMP | PROVEMENTS | | | | |
| COST (\$ in Millions) | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY2011 |
| Total PE Cost | 73.654 | 110.775 | 145.634 | 188.623 | 223.877 | 240.847 | 163.322 | 71.380 |
| 0439/Standard Missile Improvements | 41.060 | 52.780 | 24.926 | 8.047 | 15.762 | 7.903 | 0.376 | 0.423 |
| 3092/Standard Missile 6 Program | 32.594 | 53.574 | 120.708 | 180.576 | 208.115 | 232.944 | 162.946 | 70.957 |
| 9559/MK-41 Open Architecture Upgrades | 0.000 | 2.937 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9560/Real Time Image Processing - Silicon Brain | 0.000 | 1.484 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Defense Emergency Response Funds (DERF) Funds: No DERF funds are associated with this program/project.

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

- "...The following capabilities are required:"
- "...Effective weapon systems that will deliver timely lethal firepower to the threat systems and supporting structures in hostile territory, provide in-flight destruction capabilities over the total flight path, and provide continuous protection to forward deployed maneuver forces as well as theater rear assets."
- -Mission Need Statement for Joint Theater Air and Missile Defense, May 1999
- "Projecting and sustaining U.S. forces in distant anti-access or area-denial environments and defeating anti-access and area-denial threats:"
- "Defenses against known and emerging threats must be developed."

"The United States must retain the capability to send well-armed and logistically supported forces to critical points around the globe, even in the face of enemy opposition"

CLASSIFICATION: Unclassified

| EXHIBIT R-2, RDT&E Budget Item Justification | DATE: |
|---|--|
| | February 2005 |
| APPROPRIATION/BUDGET ACTIVITY | R-1 ITEM NOMENCLATURE |
| RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5 | 0604366N/STANDARD MISSILE IMPROVEMENTS |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

"The QDR emphasizes the need for new investments that would enable U.S. forces to defeat anti-access and area-denial threats and to operate effectively in critical areas."

- Quadrennial Defense Review Report, September 30, 2001

Standard Missile-2 (SM-2) Block IIIB is the Navy's premier Anti-Air Warfare (AAW) missile, providing both area air defense for the fleet and self defense for individual Aegis CGs and DDGs, as required by the Joint TAMD MNS, DPG, QDR, and Ship Class AAW Self Defense Capstone Requirements Document. Minor agility, fuzing, and computer modifications to SM-2 Block IIIB are under development to restore performance in the near term against a specific existing proliferated ASCM threat. Continuous analysis of missile capabilities vs. ever-evolving and proliferating aircraft and anti-ship cruise missiles and long-range planning are required to keep pace with the threat. A separate, classified, advanced technology effort began to transition in FY03, and in FY04 a new program started to develop a family of advanced surface missile systems. These new missile systems will leverage the Navy investment in the Aegis Weapon System, CEC, and airborne early warning systems, which will be upgraded in concert with missile development to support a fully integrated extended range detect-to-engage capability. Funding for those upgrades are also included in this line. Together, this family of systems will provide the air superiority and the umbrella of protection against the full spectrum of projected future cruise missile (anti-ship and land attack) and manned aircraft threats discussed in the Joint TAMD MNS, DPG, QDR, and TAMD Capstone Requirements Document.

CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justificatio | n | | | | | | DATE: | |
|--|----------------|------------------|-----------|---------|-----------------|-------------------|---------|---------|
| | | | | | | | Februai | ry 2005 |
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEME | NT NUMBER AND | NAME | | PROJECT NUMBE | R AND NAME | | |
| RDT&E, N / BA-5 | 0604366N/STAND | ARD MISSILE IMPI | ROVEMENTS | | 0439 Standard M | issile Improvemer | nts | |
| COST (\$ in Millions) | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
| Project Cost | 41.060 | 52.780 | 24.926 | 8.047 | 15.762 | 7.903 | 0.376 | 0.423 |
| RDT&E Articles Qty | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Minor modifications to SM-2 Block IIIB will restore performance in the near term against a specific existing proliferated ASCM threat. These include modifications to the MK45 Target Detection Device (TDD) to improve the lethal radius at low altitudes, guidance software to improve missile agility, and a new digital signal processor. Funding for the MK 45 Mod 14 TDD advanced technology development has been provided under Conventional Munitions, P.E. 0603609N, Project 1821, and the complementary engineering and transition to production efforts is funded in this line. Continuous analysis of missile capabilities vs. evolving and proliferating aircraft and anti-ship cruise missiles and long-range planning are required to keep pace with the threat. A separate, classified, advanced technology effort began to transition in FY03, and in FY04 a new program started to develop a family of advanced surface missile systems. The Aegis Weapon System, CEC, and airborne early warning systems also will be upgraded in concert with missile development to support a fully integrated extended range detect-to-engage capability.

R-1 SHOPPING LIST - Item No.

106

CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: | oruary 2005 |
|--|----------------------------------|--|-----------------------------------|----------------|
| PROPRIATION/BUDGET ACTIVITY | | PROJECT NUMBER AND N | | ordary 2005 |
| DT&E, N / BA-5 | | 0439 Standard Missile Imp | orovements | |
| Accomplishments/Planned Program | -1 | | | |
| | T. (24 | F)/ 05 | 5)/ 00 | |
| Accomplishments/Effort/Subtotal Cost | FY 04 4.704 | FY 05 | FY 06 | FY 07 |
| RDT&E Articles Quantity | 4.704 | | | |
| 112 Tal Tittoroo Quantity | | | | |
| | | | | |
| | EV 04 | EV 05 | EV 06 | EV 07 |
| Accomplishments/Effort/Subtotal Cost | FY 04 0.145 | FY 05 0.150 | FY 06 0 150 | FY 07 0 307 |
| Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity | FY 04 0.145 | FY 05 0.150 | FY 06 0.150 | FY 07 0.307 |
| RDT&E Articles Quantity | | | | |
| RDT&E Articles Quantity Studies: | 0.145 | 0.150 | 0.150 | 0.307 |
| RDT&E Articles Quantity Studies: FY04/FY05/FY06/FY07: Failure analyses, technology | 0.145 | 0.150 | 0.150 | 0.307 |
| RDT&E Articles Quantity Studies: | 0.145 | 0.150 | 0.150 | 0.307 |
| RDT&E Articles Quantity Studies: FY04/FY05/FY06/FY07: Failure analyses, technology | 0.145 | 0.150 | 0.150 | 0.307 |
| RDT&E Articles Quantity Studies: FY04/FY05/FY06/FY07: Failure analyses, technology | 0.145 gy assessments, analyses o | 0.150 f missile capablity vs. threat, and | 0.150 d long-range planning to ke | 0.307 |
| RDT&E Articles Quantity Studies: FY04/FY05/FY06/FY07: Failure analyses, technologiand proliferating threat. | 0.145 gy assessments, analyses o | 0.150 f missile capablity vs. threat, and | 0.150 d long-range planning to ke | 0.307 |
| RDT&E Articles Quantity Studies: FY04/FY05/FY06/FY07: Failure analyses, technology | 0.145 gy assessments, analyses o | 0.150 f missile capablity vs. threat, and | 0.150 d long-range planning to ke | 0.307 |

CLASSIFICATION: Unclassified

| | | DATE: | L 2005 |
|-----------------------|--------------------------|---|---|
| | PROJECT NUMBER AND N | | bruary 2005 |
| | | | |
| | 0439 Standard Missile Im | provements | |
| | | | |
| | | | |
| FY 04 | FY 05 | FY 06 | FY 07 |
| 11.317 | 11.342 | 10.776 | 0.000 |
| | | | |
| | | | |
| 2 Block IIIB. | | | |
| | | | |
| | | | |
| view. | | | |
| viow. | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | E)/ 05 | F)/ 00 | F)/ 07 |
| FY 04 | FY 05 | | FY 07 |
| | | 2.500 | 7.740 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| () ship combat system | n. | | |
| () ship combat system | n. | | |
| () ship combat systen | n. | | |
| () ship combat systen | n. | | |
| () ship combat systen | n. | | |
| () ship combat systen | n. | | |
| () ship combat systen | n. | | |
| | | | |
| () ship combat systen | n. FY 05 | FY 06 | FY 07 |
| | FY 05 | FY 06 | FY 07 |
| | | FY 06 | FY 07 |
| | FY 05 | FY 06 | FY 07 |
| | | FY 04 FY 05 11.317 11.342 2 Block IIIB. view. | 11.317 11.342 10.776 2 Block IIIB. view. FY 04 FY 05 FY 06 |

CLASSIFICATION: Unclassified

| | on | | DATE: | |
|--|-------|---------------------------|------------|-------------|
| | | | | bruary 2005 |
| PROPRIATION/BUDGET ACTIVITY | | PROJECT NUMBER AND N | IAME | |
| DT&E, N / BA-5 | | 0439 Standard Missile Imp | provements | |
| Accomplishments/Planned Program (Cont.) | | | | |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost | | 4.000 | | |
| RDT&E Articles Quantity | | | | |
| | | | | |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost | | | | |
| RDT&E Articles Quantity | | | | |
| | | | | |
| Accomplishments/Effort/Subtotal Cost | FY 04 | FY 05 | FY 06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity | FY 04 | FY 05 | FY 06 | FY 07 |

R-1 SHOPPING LIST - Item No. 106

UNCLASSIFIED

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Project Justification | | | | DATE: | |
|---|--------------------------------------|---------|---------------|-------------------|---------------|
| | | | | | February 2005 |
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT NUMBER AND NAME | | PROJECT NUM | BER AND NAME | |
| RDT&E, N / BA-5 | 0604366N/STANDARD MISSILE IMPROVEMEN | ITS | 0439 Standard | Missile Improveme | ents |
| C. PROGRAM CHANGE SUMMARY: | | | | | |
| Funding: | FY 2004 | FY 2005 | FY 2006 | FY 2007 | |
| Presidents Budget (PB05) | 42.717 | 49.792 | | 0.245 | |
| President Budget (PB06) | 41.060 | 52.780 | 24.926 | 8.047 | |
| Total Adjustments | -1.657 | 2.988 | 2.679 | 7.802 | |
| Summary of Adjustments | | | | | |
| ILWI | | | 2.500 | 7.740 | |
| Cancelled Acounts/Undist Reductions SBIR | -0.583 | -0.512 | 0.179 | 0.062 | |
| Management Improvement | -1.035 | | | | |
| Advance Missile Data Link | -1.033 | 3.500 | 1 | | |
| Economic Assumptions | | 3.300 | , | | |
| Inflation | -0.039 | | | | |
| Subtotal | -1.657 | 2.988 | 3 2.679 | 7.802 | |
| | | | | | |
| Schedule: | | | | | |
| Not Applicable | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Technical: | | | | | |
| Not Applicable | | | | | |
| | | | | | |
| | | | | | |
| <u> </u> | D 4 CHODDING LICT II | | 20 | | |

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: |
|--|--|-------------------------------|--------------------------------|
| | | | February 2005 |
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT NUMBER AND NAME | PROJECT NUMBER AND NA | AME |
| RDT&E, N / BA-5 | 0604366N/STANDARD MISSILE IMPROVEMENTS | 0439 Standard Missile Imp | provements |
| D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| E. ACQUISITION STRATEGY: * | | | |
| Not Applicable | | | |
| | | | |
| | | | |
| F. MAJOR PERFORMERS: ** | | | |
| Raytheon Missile Systems, Tucson, AZ starting in FY04 wil | Il be the Prime contractor in the development of a live fire | demonstration for Advanced So | urface Missile System (09/04). |
| | | | |
| | | | |
| * Not required for Budget Activities 1,2,3, and 6 ** Required for DON and OSD submit only. | | | |

CLASSIFICATION: Unclassified

| | | | | | | | | | | DATE: | | | | |
|---------------------------|------------------------------|--------------------------------|---------------|--------|------------------------|---------------|------------------------------------|--------|------------------------|---------------|------------------------|---------------------|---------------|------------|
| Exhibit R-3 Cost Analys | sis (page 1) | | | | | | | | | | | February 20 | 05 | |
| APPROPRIATION/BUDGET | | | / ELEMENT | | | PROJECT NU | | | | | | | | |
| , - | A-5 | | STANDARD MISS | | | 0439 Standa | 0439 Standard Missile Improvements | | | | | • | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | | FY 04 | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | FY 06 | FY 06 Award Date | FY 07 Cost | FY 07 Award Date | Cost to Complete | Total Cost | Target Val |
| Design and Analysis | 277 | | | | | | | | | | | | | |
| | SS/CPAF | Raytheon | 16.125 | 37.901 | 04/04 | 42.252 | 11/04 | 14.528 | 11/05 | 5.102 | 11/06 | Continuing | Continuing | 1 |
| | PR | JHU/APL | 1.140 | 0.500 | 02/04 | 7.238 | 11/04 | 1.625 | 11/05 | 0.245 | 11/06 | Continuing | Continuing | 1 |
| | MP | MIT | 0.000 | 0.050 | 03/04 | 0.200 | 11/04 | | | | | Continuing | Continuing | J |
| | WX | NSWC Dahlgren | 785.634 | 0.160 | 12/04 | 0.050 | 11/04 | 2.500 | 11/05 | 1.350 | 11/06 | Continuing | Continuing | J |
| | WX | NSWC/IH | 0.049 | 0.300 | 12/04 | | | | | | | Continuing | Continuing | J |
| | WX | NAWC China Lake | 0.435 | 0.075 | 01/04 | | | | | | | Continuing | Continuing | J |
| | WX | NSWC /PHD | 0.120 | 0.100 | 01/04 | 0.040 | 12/04 | | 11/05 | | | Continuing | Continuing | Į. |
| | PR | Lockheed Martin | | | | 3.000 | 12/04 | 2.500 | 11/05 | 1.350 | 11/06 | Continuing | Continuing | Į. |
| | WX | CNO | 0.010 | | | | | | | | | | | |
| | PD | CMDP | 4.795 | | | | | | | | | | | |
| | PR | CAN | 0.000 | | | | | | | | | | | |
| | WX | NSWC/CRANE | 0.050 | | | | | | | | | | | |
| | WX | ONR | 0.000 | | | | | | | | | | | |
| | WX | NWS EARLE | 0.000 | | | | | | | | | | | |
| | WX | COMPTEVFOR | 0.100 | | | | | | | | | | | |
| | WX | CARDEROCK | 0.050 | | | | | | | | | | | |
| | WX | WMSR | | | | | | 2.548 | 11/05 | | | Continuing | Continuing | J . |
| | PR | BAE | | | | 25 | 01/05 | 0.075 | 11/05 | | | Continuing | Continuing | j . |
| | WX | JSPO | | | | | | 0.200 | 11/05 | | | Continuing | Continuing | , |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 1 |
| | | | | | | 1 | | | | | | | | + |
| Subtotal Product Developm | ent | | 808.508 | 39.086 | | 52.780 | | 23.976 | | 8.047 | | 0.000 | Continuing | ,—— |

Remarks:

CLASSIFICATION: Unclassified

| E 1 11 11 B 0 0 1 1 1 1 1 | ۵١ | | | | | | | | | | DATE: | | | | |
|--|------------------------------|--------------------------------------|--------------|---------------|-------------------------|------------------------|---------------|------------------------|---------------|------------------------|---------------|------------------------|---------------------|--|--------------------------|
| Exhibit R-3 Cost Analysis (p APPROPRIATION/BUDGET ACT | | | PROGRAM E | I EMENIT | | | IDDO IECT NI | JMBER AND I | NAME | | | | February 20 | 05 | |
| RDT&E, N / BA-5 | VIII | | | TANDARD MISS | SII E IMPROVE | MENTS | | | nprovements | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | 000430014/01 | Total PY s | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | FY 06 Cost | FY 06 Award Date | FY 07 Cost | FY 07 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Developmental Test & Evaluation | WX | NSWC Port H | ueneme | 0.145 | | | | | 0.175 | | | | | Continuing | Continuin |
| | WX | WSMR | | 0.000 | | | | | | | | | | Continuing | Continuin |
| Operational Test & Evaluation | | | | | | | | | | | | | | 0.000 |) |
| Live Fire Test & Evaluation | | | | | | | | | | | | | | 0.000 |) |
| Test Assets | | | | | | | | | | | | | | 0.000 |) |
| Tooling | | | | | | | | | | | | | | 0.000 |) |
| GFE | | | | | | | | | | | | | | 0.000 |) |
| Award Fees | | | | | | | | | | | | | | 0.000 | O |
| Subtotal T&E | | | | 0.145 | 0.000 | | 0.000 |) | 0.175 | 5 | 0.000 | | 0.000 | Continuing | 1 |
| Remarks: | | | | | | | | | | | | | | | |
| | C/CPAF | various | | 0.082 | 1 130 | 12/04 | 1 | 11/04 | 0.750 | 11/05 | T | T | | Continuing | Continuin |
| Contractor Engineering Support | C/CPAF | various | | 0.082 | 1.130 | 12/04 | | 11/04 | 0.750 | 11/05 | | | | Continuing | <u> </u> |
| Contractor Engineering Support Government Engineering Support | C/CPAF | various various | | 0.082 | 1.130 | 12/04 | | 11/04 | 0.750 | 11/05 | | | | 0.000 |) |
| Contractor Engineering Support | | | | | | | | 11/04 | 0.750 | 11/05 | | | | | Continuin |
| Contractor Engineering Support Government Engineering Support Program Management Support | | | | 1.000 | 0.824 | | | 11/04 | | 11/05 | | | | 0.000 Continuing | Continuin Continuin |
| Contractor Engineering Support Government Engineering Support Program Management Support Travel | | | | 1.000 | 0.824 | | | 11/04 | | 11/05 | | | | 0.000 Continuing Continuing | Continuin Continuin |
| Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation | | | | 1.000 | 0.824 0.020 | 12/04 | 0.000 | | | | 0.000 | | 0.000 | 0.000 Continuing Continuing 0.000 | Continuin Continuin |
| Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation SBIR Assessment | | | | 1.000 | 0.824 0.020 | 12/04 | 0.000 | | 0.025 | | 0.000 | | 0.000 | 0.000 Continuing Continuing 0.000 | Continuin Continuin |
| Contractor Engineering Support Government Engineering Support Program Management Support Travel Transportation SBIR Assessment Subtotal Management | | | | 1.000 | 0.824 0.020 1.974 | 12/04 | 0.000 | | 0.025 | | 0.000 | | 0.000 | 0.000 Continuing Continuing 0.000 0.000 Continuing | Continuin Continuin |

CLASSIFICATION: Unclassified

| | | | | | | | | | | DATE: | | | | |
|--------------------------|---------------|------------------------------|--------------------------------------|-------------|-----------------------|---------------|------------------------|---------------|------------------------|---------------|------------------------|---------------------|---------------|--------------------------|
| Exhibit R-3 Cost A | Analysis (pag | e 1) | | | | | | | | | | February 20 | 05 | |
| APPROPRIATION/BI | UDGET ACTIVI | TY | | PROGRAM E | LEMENT | | | PROJECT N | UMBER AN | ID NAME | | | | |
| RDT&E, N / | BA-5 | | | 0604366N/ST | ANDARD MISS | SILE IMPROVE | EMENTS | 0439 Standa | | Improvements | | | | |
| Cost Categories | | Contract Method & Type | Performing Activity & Location | | Total PY s Cost | FY 03 Cost | FY 03 Award Date | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Development Support | | | | | | | | | | | | | 0.000 | |
| Software Development | | | | | | | | | | | | | 0.000 | |
| Integrated Logistics Sup | port | | | | | | | | | | | | 0.000 |) |
| Configuration Managem | | | | | | | | | | | | | 0.000 |) |
| Technical Data | | | | | | | | | | | | | 0.000 |) |
| Studies & Analyses | | | | | | | | | | | | | 0.000 |) |
| GFE | | | | | | | | | | | | | 0.000 |) |
| Award Fees | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 |) |
| | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 | |
| Subtotal Support | | | | | 0.000 | 0.000 |) | 0.00 | 0 | 0.00 | D | 0.000 | 0.000 | |
| Remarks: | | | | | | | | | | | | | | |

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Budget Item Justification | | | | | | DATE: | | |
|---|---------|---------|---------|----------------|-----------------|-----------|---------------|---------|
| | | | | | | | February 2005 | |
| APPROPRIATION/BUDGET ACTIVITY | | | | R-1 ITEM NOMEN | CLATURE | | | |
| RESEARCH DEVELOPMENT TEST & EVALUAT | IBA-5 | | | 0604366N/STAND | ARD MISSILE IMP | ROVEMENTS | | |
| COST (\$ in Millions) | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
| Total PE Cost | 32.594 | 53.574 | 120.708 | 180.576 | 208.115 | 232.944 | 162.946 | 70.957 |
| 3092/Standard Missile 6 Program | 32.594 | 53.574 | 120.708 | 180.576 | 208.115 | 232.944 | 162.946 | 70.957 |
| | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project addresses the Navy's requirement for an extended range shipboard air defense missile. The SM-6 Extended Range Active Missile (ERAM) is the Navy's transformational enabler for the Sea Shield Operational Concept and enables the opportunity for Sea Basing Sea Strike. This effort includes risk reduction, and SD&D design, development, insensitive munition improvement, transition to production and operational test of the latest STANDARD Missile with the kinematic performance to defeat current and projected threats that possess low altitude, high altitude, high velocity and maneuver characteristics at the max kinematic range of the missile.

This program leverages existing missile technology and advanced missile technology. It aligns missile technology roadmaps across the Services (NAVSEA, NAVAIR, USAF, USMC and USA) and missile variants within the Services, taking advantage of the Navy's investment in the Aegis Weapon System, CEC, and airborne early warning systems. This missile will provide an extended range engagement capability to provide the air superiority and the umbrella of protection for joint U.S. forces and allies against the full spectrum of manned-fixed and rotary-wing aircraft, unmanned aerial vehicles, and land attack and anti-ship cruise missiles in flight, thereby contributing to the continuous protection of forward deployed ground maneuver forces as well as theater rear assets as discussed in the Joint TAMD MNS, DPG, QDR, TAMD Capstone Requirements Document, Forward From the Sea, Joint Vision 2010/2020, the 2002/2003 Naval Transformational Roadmap and the Operational Requirements Document for SM-6 Extended Range Active Missile (ERAM).

| EXHIBIT R-2a, RDT&E Project Justification | า | | DATE: | |
|---|---|--|---|------------------|
| PROPRIATION/BUDGET ACTIVITY | <u> </u> | PROJECT NUMBER AND N | | ruary 2005 |
| | | | NAIVIE | |
| DT&E, N / BA-5 | | 3092/SM-6 | | |
| Accomplishments/Planned Program | | | | |
| | FY04 | FY05 | FY06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost | 5.480 | 9.644 | 11.960 | 10.919 |
| RDT&E Articles Quantity | 0.100 | 5.5 | 1.11000 | 10000 |
| SM-6/AWS & VLS Integration FY04/FY05/FY06/FY07:Aegis Weapon System an | nd MK 41 Vertical Launch Syster | n integration. | | |
| FY04/FY05/FY06/FY07:Aegis Weapon System an | FY 04 | FY 05 | FY 06 | FY 07 |
| FY04/FY05/FY06/FY07:Aegis Weapon System an Accomplishments/Effort/Subtotal Cost | | | FY 06 103.148 | FY 07 150.657 |
| FY04/FY05/FY06/FY07:Aegis Weapon System an Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity | FY 04 27.114 | FY 05 38.930 | 103.148 | 150.657 |
| Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity Missile development. FY 04: Planning, requirement FY 05: Preliminary Design Readines | FY 04 27.114 ents definition, trade studies, Miles Review ss Review (Critical Design Revieus and Test/Environmental Test | FY 05 38.930 estone B preparation and dec | 103.148 cision, SD&D Contract Awa on and Round Level Test | 150.657 |
| Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity Missile development. FY 04: Planning, requirement FY 05: Preliminary Desi FY 06: Design Readinest FY 07: Ground Integratition * This effort is also integrated with and funded from | FY 04 27.114 ents definition, trade studies, Miles Review ss Review (Critical Design Revieus and Test/Environmental Test | FY 05 38.930 estone B preparation and dec w) s/Flight Test Round Integration System element of Project K | 103.148 cision, SD&D Contract Awa on and Round Level Test 0439 FY06 | 150.657 |
| Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity Missile development. FY 04: Planning, requirement FY 05: Preliminary Desi FY 06: Design Readines FY07: Ground Integrati | FY 04 27.114 ents definition, trade studies, Militian Review ss Review (Critical Design Revieus and Test/Environmental Test the Advanced Surface Missile | FY 05 38.930 estone B preparation and dec w) s/Flight Test Round Integration System element of Project K | 103.148 cision, SD&D Contract Awa on and Round Level Test 0439 | 150.657 rd. |

CLASSIFICATION: Unclassified

| C. PROGRAM CHANGE SUMMARY: Funding: President Budget (PB05) President Budget PB06) Total Adjustments Summary of Adjustments Cancelled Accounts/Undistributed Reduction Extended Range Management | ELEMENT NUMBER AND NAME TANDARD MISSILE IMPROVEMENT FY 2004 34.210 32.594 -1.616 | | FY 2006 165.048 120.708 -44.340 | FY 2007 189.757 180.576 -9.181 | |
|---|---|-----------------------------|--|---|--|
| C. PROGRAM CHANGE SUMMARY: Funding: President Budget (PB05) President Budget PB06) Total Adjustments Summary of Adjustments Cancelled Accounts/Undistributed Reduction Extended Range Management | FY 2004 34.210 32.594 -1.616 | FY 2005 49.230 53.574 | FY 2006 165.048 120.708 | 189.757 180.576 | |
| Funding: President Budget (PB05) President Budget PB06) Total Adjustments Summary of Adjustments Cancelled Accounts/Undistributed Reduction Extended Range Management | 34.210 32.594 -1.616 | 49.230 53.574 | 165.048 120.708 | 189.757 180.576 | |
| President Budget (PB05) President Budget PB06) Total Adjustments Summary of Adjustments Cancelled Accounts/Undistributed Reduction Extended Range Management | 34.210 32.594 -1.616 | 49.230 53.574 | 165.048 120.708 | 189.757 180.576 | |
| President Budget (PB05) President Budget PB06) Total Adjustments Summary of Adjustments Cancelled Accounts/Undistributed Reduction Extended Range Management | 34.210 32.594 -1.616 | 49.230 53.574 | 165.048 120.708 | 189.757 180.576 | |
| President Budget PB06) Total Adjustments Summary of Adjustments Cancelled Accounts/Undistributed Reduction Extended Range Management | -1.616 | 53.574 | | | |
| Total Adjustments Summary of Adjustments Cancelled Accounts/Undistributed Reduction Extended Range Management | -1.616 | | | | |
| Cancelled Accounts/Undistributed Reduction Extended Range Management | -0.523 | | | -9.101 | |
| Cancelled Accounts/Undistributed Reduction Extended Range Management | -0.523 | | | | |
| Extended Range Management | | -0.656 | -0.225 | -0.292 | |
| Management | 5.000 | | | | |
| | | | -0.620 | -0.961 | |
| Inflation | -0.036 | | 1.237 | 2.305 | |
| Execution Realignment | -5.260 | | | | |
| ERAM Incentive | | | -15.100 | -28.900 | |
| SM-6 Insentive Munition | | 5.000 | 5.600 | 19.000 | |
| ERAM Reduction | | | -35.000 | | |
| Contract Sppt | | | -0.032 | -0.033 | |
| NAVSEA Civilian | | | -0.200 | -0.300 | |
| SBIR | -0.797 | | | | |
| Subtotal | -1.616 | 4.344 | -44.340 | -9.181 | |
| | | | | | |

CLASSIFICATION: Unclassified

| XHIBIT R-2a, RDT&E | Project Justification | | | | | | | | DATE: | | |
|----------------------|------------------------------------|-----------------|-----------------|---------------|--------------|---------|------------|-------------|---------|----------|---------|
| | | | | | | | | | | Februa | ry 2005 |
| PPROPRIATION/BUDGE | T ACTIVITY | | PROGRAM E | LEMENT NUM | IBER AND NAM | ИE | PROJECT NU | IMBER AND N | IAME | | |
| DT&E, N / | BA-5 | | 0604366N/ST | ANDARD MISS | SILE IMPROVE | EMENTS | 3092/SM6 | | | | |
| D. OTHER PROGRA | AM FUNDING SUMMARY: | | | | | | | | | | |
| | | | | | | | | | | To | Total |
| Line Item No. & Na | <u>ame</u> | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | Complete | Cost |
| WPN 2234 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 98.000 | 131.000 | 142.445 | CONT. | CONT. |
| QTY | | | | | | | 15 | 25 | 30 | | |
| | | | | | | | | | | | |
| E. ACQUISITION STR | ATEGY: * | | | | | | | | | | |
| SM-6 Acquisitio | n Strategy signed by OSD A | AT&L 3 March 20 | ı04 | | | | | | | | |
| OW O Moquiolilo | in circlegy signed by CCD / | TIGE O March 20 | 04 | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| F. MAJOR PERFORM | 1ERS: ** | | | | | | | | | | |
| Raytheon Miss | sile Systems, Tucson, Arizor | na · SM-6 SD&F | Contract awa | rded Septemb | er 2004 | | | | | | |
| raythcon who | 5110 Oystoriis, 1 000011, 7 111201 | na Ow o obac |) Contract awar | raca ocpicino | 51 2004 | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| * Not required for E | Budget Activities 1,2,3, and | d 6 | | | | | | | | | |
| ** Required for DON | | | | | | | | | | | |

| Exhibit R-3 Cost Analysis (pag APPROPRIATION/BUDGET ACTIVITION) | e 1) | Innoch | AM ELEMENT | | | PROJECT NU | IMPED AND N | A N 4 E | | | February | 2005 | | |
|--|------------------------------|--------------------------------------|-------------------------------|---------------|------------------------|---------------|------------------------|---------------|------------------------|---------------|------------------------|---------------------|---------------|-------------|
| RDT&E, N / BA-5 | ΙŤ | | AM ELEMENT N/STANDARD MISS | SII E IMPROVE | MENTS | 3092/SM-6 | INBER AND N | AIVIE | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | FY 06 Cost | FY 06 Award Date | FY 07 Cost | FY 07 Award Date | Cost to Complete | Total Cost | Target Valu |
| Primary Hardware Development | | | | 1 | | | | | | | 1 | | 0.000 | |
| Ancillary Hardware Development | | | | | | | | | | | | | 0.000 | |
| Component Development | | | | | | | | | | | | | 0.000 |) |
| Design and Analysis | PR | RAYTHEON | 3.500 | | | 37.354 | 11/04 | 100.066 | | 155.198 | 11/06 | | | |
| | PR | JHU/APL, Laurel MD | 0.100 | | | 3.950 | 11/04 | 3.500 | 11/05 | 4.000 | 11/06 | Continuing | Continuing | |
| | PR | MIT Lincoln Lab, Lexing | | 0.050 | | 0.300 | 11/04 | 0.100 | 11/05 | 0.100 | 11/06 | Continuing | Continuing | |
| | WX | NAWC WD China Lake | | 0.100 | | 0.050 | 11/04 | 0.100 | 11/05 | 0.100 | 11/06 | Continuing | Continuing | • |
| | WX | NSWC Dahlgren, VA | 0.050 | | 01/04 | 1.385 | | 1.500 | | 1.210 | 11/06 | Continuing | Continuing | |
| | WX | NSWC Indian Head, MD | | | ļ | 0.200 | 11/04 | 0.000 | 11/05 | 0.000 | 11/06 | Continuing | Continuing | 1 |
| | WX | NSWC Port Hueneme, | CA | 0.546 | 03/04 | 0.600 | 11/04 | 0.500 | 11/05 | 0.500 | 11/06 | Continuing | Continuing | 4 |
| | WX | NSWC Crane, IN | | | | 0.020 | 11/04 | 0.025 | | 0.040 | 11/06 | Continuing | Continuing | 9 |
| | MP | JSPO/EGLIN | 1.148 | | 03/04 | 0.000 | 11/04 | 0.000 | 11/05 | 0.000 | 11/06 | | | |
| | PR | LOCKHEED MARTIN | 3.854 | | | 0.000 | 11/04 | 0.000 | 11/05 | 0.000 | 11/06 | | | ļ |
| | WX | NSWC Corona | | 0.020 | | 0.025 | 11/04 | 0.032 | 11/05 | 0.078 | 11/06 | | 0.077 | ' |
| | RX | ONR | | 0.150 | 02/04 | 0.150 | 11/04 | 0.150 | 11/05 | 0.150 | 11/06 | | | |
| - | | NRL | | 0.090 | 04/04 | 0.075 | 11/04 | 0.150 | 11/05 | 0.150 | 11/06 | | | |
| | WX | COMOPTEVFOR | | 0.135 | 04/04 | 0.115 | 11/04 | 0.150 | 11/05 | 0.150 | 11/06 | | | |
| | WX | CARDEROCK | | | | 0.150 | 01/05 | | | | | | | |
| | | | | | | | | | | | | | | |
| Ship Integration | PR/WX | various | 0.070 | 4.250 | 02/04 | 4.100 | 01/05 | 8.000 | 11/05 | 6.700 | 11/06 | Continuing | Continuing | 3 |
| | PR/WX | various | | 1.230 | 03/04 | 3.100 | 01/05 | 3.360 | 11/05 | 3.200 | 11/06 | | | |
| Ship Suitability | | | | | | | | | | | | | 0.000 |) |
| Systems Engineering | | | | | | | | | | | | | 0.000 | |
| Training Development | | | | | | | | | | | | | 0.000 | |
| Licenses | | | | | | | | | | | | | 0.000 | |
| Tooling | | | | 1 | | | | | | | | | 0.000 | |
| GFE | | | | 1 | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 1 | | 0.000 | |
| Subtotal Product Development | | | 8.760 | 31.241 | 1 | 51.574 | | 117.633 | , | 171.576 | + | Continuing | Continuing | |
| Remarks: | | | · | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Development Support | | | | | | | | | | | | Continuing | Continuing | 1 |
| Software Development | | | | | | | | | | | | | 0.000 |) |
| Training Development | | | | | | | | | | | | | 0.000 |) |
| Integrated Logistics Support | | | | | | | | | | | | | 0.000 | |
| Configuration Management | | | | | | | | | | | | | 0.000 | _ |
| Technical Data | | | | | | | İ | | | | | | 0.000 | |
| | 1 | | | 1 | | | <u> </u> | | | | 1 | | 0.000 | |
| GFE | + | † | | 1 | | İ | | İ | | İ | | | 0.000 | _ |
| GFE Award Fees | | | | | | 1 | | 1 | 1 | 1 | | | 0.000 | |

CLASSIFICATION: Unclassified

| Exhibit R-3 Cost Analysis (pa | | | | | | | | DATE: | | | | | | |
|---|----------|----------------------------|----------------------|------------|---------|-------------------------|-------------|-------|---------|-------|----------|------------|---|--------------|
| | | | | | | Innoventur | | | | | February | / 2005 | | |
| APPROPRIATION/BUDGET ACTI RDT&E, N / BA-5 | VIIY | PROGRAM E | LEMENT ANDARD MIS | | EMENITO | PROJECT NU 3092/SM-6 | IMBEK AND I | NAME | | | | | | |
| Cost Categories | Contract | l l | Total | T INIPROVI | FY 04 | 3092/3IVI-0 | FY 05 | 1 | FY 06 | 1 | FY 07 | 1 | 1 | |
| 50st Categories | Method | Activity & | PY s | FY 04 | Award | FY 05 | Award | FY 06 | Award | FY 07 | Award | Cost to | Total | Target Value |
| | & Type | Location | Cost | Cost | Date | Cost | Date | Cost | Date | Cost | Date | | Cost | of Contract |
| Developmental Test & Evaluation | WX | NSWC Port Hueneme, CA | 0.000 |) | | 0.200 | 11/04 | 1.000 | 11/05 | 5.500 | 11/06 | Continuing | Continuing | |
| | WX | White Sands Missile Range, | 0.000 |) | | 0.400 | 11/04 | 0.100 | 11/05 | 0.200 | 11/06 | Continuing | Continuing | |
| | WX | PMRF | | | | | | 0.400 | 11/05 | 1.700 | 11/06 | | 0.100 | |
| Targets | | | | | | | | | | | | | | |
| Operational Test & Evaluation | | | | | | | | | | | | | 0.000 | |
| Live Fire Test & Evaluation | | | | | | | | | | | | | 0.000 | |
| Test Assets | | | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | | | 0.000 | |
| Subtotal T&E | | | 0.000 | 0.000 |) | 0.600 | | 1.50 | n | 7.400 | | Continuing | Continuing | |
| | | | | | | | | | | | | | | |
| | | _ | | | | | | | | | | | | |
| Contractor Engineering Support | CPAF | various | 0.000 | 1.300 | 03/04 | 1.300 | 11/04 | 1.500 | 0 11/05 | 1.500 | 11/06 | Continuing | Continuing | |
| <u> </u> | CPAF | various | 0.000 | 1.300 | 03/04 | 1.300 | 11/04 | 1.500 | 0 11/05 | 1.500 | 11/06 | Continuing | Continuing 0.000 | |
| Government Engineering Support | CPAF | various | 0.000 | 1.300 | 03/04 | 1.300 | 11/04 | 1.50 | 0 11/05 | 1.500 | 11/06 | Continuing | · · · · · · · · · · · · · · · · · · · | |
| Contractor Engineering Support Government Engineering Support Program Management Support Travel | CPAF | various | 0.000 | 0.053 | | 0.100 | | 1.50 | | 1.500 | 11/06 | Continuing | 0.000 0.000 | |
| Government Engineering Support Program Management Support Travel | CPAF | various | 0.000 | | | | | | | | 11/06 | | 0.000 0.000 | |
| Government Engineering Support Program Management Support | CPAF | various | 0.000 | | | | | | | | 11/06 | | 0.000 0.000 Continuing | |
| Government Engineering Support Program Management Support Travel Labor (Research Personnel) | CPAF | various | 0.000 | 0.053 | 3 | | | | 5 | | 11/06 | | 0.000 0.000 Continuing 0.000 | |
| Government Engineering Support Program Management Support Travel Labor (Research Personnel) SBIR Assessment | | | | 0.053 | 3 | 0.100 | | 0.07 | 5 | 0.100 | 11/06 | Continuing | 0.000 0.000 Continuing 0.000 | |
| Government Engineering Support Program Management Support Travel Labor (Research Personnel) SBIR Assessment | | various various | | 0.053 | 3 | 0.100 | | 0.07 | 5 | 0.100 | 11/06 | Continuing | 0.000 0.000 Continuing 0.000 | |
| Government Engineering Support Program Management Support Travel Labor (Research Personnel) SBIR Assessment Subtotal Management | | | | 0.053 | 3 | 0.100 | | 0.07 | 5 | 0.100 | | Continuing | 0.000 0.000 Continuing 0.000 0.000 Continuing | |
| Government Engineering Support Program Management Support Travel Labor (Research Personnel) SBIR Assessment | | | 0.000 | 0.053 | 3 | 0.100 | | 0.07 | 5 | 0.100 | | Continuing | 0.000 0.000 Continuing 0.000 0.000 Continuing | |

CLASSIFICATION: Unclassified

| EXHIBIT R4, Schedule | Profile |) | | | | | | | | ТВС |) | | | | | | | | | | | | | | DATE | : | Fe | brua | ry 20 | 05 | | |
|---|---------|----|-----------|---|-----|---------|---------|---------|-------|----------|----------|--------|--------|-------|------|-------|-------|--------|------------|----------------|-------------|------------|-------|--------|-------|------------------|-----|-------|----------|--------|------|----|
| APPROPRIATION/BUDGE | | | | | | | | | | SRAM | ELEM | | | R AND | | | | | | | | | IUMBE | R ANI | D NAN | 1E | | | | | | |
| RDT&E, N / | BA- | 5 | | | T | | | | 06043 | 866N/S | STAND | ARD N | /ISSIL | E IMP | ROVE | MENTS | S | | | | 3092/ | /SM-6 | | | 1 | | | | | | | |
| Fiscal Year | | 20 | 004 | | | 20 | 05 | | | 20 | 06 | | | 200 | 07 | | | 20 | 08 | | | 20 | 09 | | | 20 | 110 | | | 201 | 1 | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Acquisition Milestones | | | ∆ MS B | | | | | | | | | | | | | | | | | | MS | c | | | | | | | _ FRF | 7 | | |
| Design Reviews/Decisions | | | | | SRR | SFR | | ∆ DR | | | [| RR | | | F | RR | | WS | ∆ SESRE | | V | ∆ VSESF | ₹B | | | | | IOC | | | | |
| Hardware Design, Prototype & Test | | | | | | Prototy | /pe/POD | | | Design ' | Verif/PC | DM [| Flt | | | | | | | | | | | | | | | | | | | İ |
| SW Design/FQT | | | | | | | | | | | | | G1 | V-1 | | | GTV | /-2 | GTV | 3 | | | | | | | | | | | | |
| Integration & Test | | | | | | | | | | | | | | | | | Capti | ve Car | | SEDS | | | | | \ | ∆ wit | | | | | | |
| Test & Evaluation Milestones | | | | | | | | | | | | | | | | | | | I | OT-IIB2 EOA | 2 | | | | | DT IIC OT IIA | ОТ | IIB | | | | |
| Development Test & Operational Test | | | | | | | | | | | | | | | | | | | | | DT- IIB1 | | | | | | | _ | | | | ſ |
| Production Milestones | | | | | | | | | | | | | | | | | | | | I DID | AWA | ΡN | | | | | | | LRIP | I DELI | VERY | ,— |
| LRIPII FY 10 FRP FY 11 | | | | | | | | | | | | | | | | | | | | LKIP | AVVA | עט | | LRIP I | AWA | RD | | FRP A | WAR |) | | Í |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

 $^{^{\}star}$ Not required for Budget Activities 1, 2, 3, and 6

CLASSIFICATION: Unclassified

| Exhibit R-4a, Schedule Detail | | | | | | DATE: | ebruary 20 | 05 |
|--|-------------|-------------|--------------|---------|------------|------------|------------|---------|
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM E | LEMENT | | | PROJECT NU | MBER AND N | | |
| RDT&BA-5 | 0604366N/ST | ANDARD MISS | SILE IMPROVE | MENTS | 3092/SM-6 | | | |
| Schedule Profile | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
| Acquisition Strategy | 2Q | | | | | | | |
| J&A | 2Q | | | | | | | |
| Milestone II (MSII) | 3Q | | | | | | | |
| Contract Preparation | 2Q-3Q | | | | | | | |
| SRR | | 1Q | | | | | | |
| SFR | | 1Q | | | | | | |
| Preliminary Design Review (PDR) | | 4Q | | | | | | |
| Design Readiness Review | | | 3Q-4Q | | | | | |
| CSEDS | | | | | 4Q | | | |
| WSESRB | | | | | 3Q | 2Q | | |
| Developmental Testing (DT-IIA1) | | | | 1Q-4Q | 1Q-4Q | | | |
| Developmental Testing (DT-IIA2) | | | | | | 1Q-4Q | | |
| Preproduction Readiness Review (PRR) | | | | 4Q | | | | |
| Milestone C (MS C) | | | | | | 1Q | | |
| Start Low-Rate Initial Production I (LRIP I) | | | | | | 1Q | | |
| Developmental Testing (DT-IIB1) | | | | | | 1Q | | |
| Developmental Testing (DT-IIB2) | | | | | 2Q-4Q | 1Q-2Q | | |
| Start Low-Rate Initial Production II | | | | | | | 1Q | |
| Developmental Testing (DT-IIC/OTIIA) | | | | | | | 2Q | |
| Operational Testing (OT-IIB) | | | | | | | 3Q-4Q | |
| Low-Rate Initial Production I Delivery | | | | | | | 4Q | 1Q-4Q |
| Low-Rate Initail Production II Delivery | | | | | | | | 4Q |
| IOC | | | | | | | | 4Q |
| Full Rate Production (FRP) Decision | | | | | | | | 1Q |
| Full Rate Production Start | | | | | | | | 1Q |
| First Deployment | | | | | | | | 1Q |

CLASSIFICATION:

| EXHIBIT R-5, Termination Liability Funding For Major Defense | Acquisition Pro | grams, RDT&E | Contracts | | | | DATE: | |
|--|-----------------|--------------|-----------|---------|------------------|---------|---------|---------|
| | | | | | | | Februar | y 2005 |
| APPROPRIATION/BUDGET ACTIVITY | | | | | R-1 ITEM NOMEN | CLATURE | | |
| RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY | 1 | BA-5 | | | 0604366/Standard | Missile | | |
| PROGRAM | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | | | | | | | | |
| | | | | | | | | |

This is a reimbursable contract that does not specify termination liability.

*Liability Costs:

- * Limitation of Funds (FAR 52.232-22)
- * Limitation of Cost (FAR 52.232-20)

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Budget Item Justification | | | | | | DATE: | | |
|---|---------|---------|---------|----------------|-----------------|-----------|---------------|---------|
| | | | | | | | February 2005 | |
| APPROPRIATION/BUDGET ACTIVITY | | | | R-1 ITEM NOMEN | CLATURE | | | |
| RESEARCH DEVELOPMENT TEST & EVALUAT | BA-5 | | | 0604366N/STAND | ARD MISSILE IMP | ROVEMENTS | | |
| COST (\$ in Millions) | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
| Total PE Cost | 0.000 | 2.937 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9559/MK-41 Open Architecture Upgrades | 0.000 | 2.937 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The re-architecture of the MK 41 Vertical Launch System (VLS) Launch Control System (LCS) to meet newly established DoD and USN Open Architecture (OA) requirements. The OA compliant LCS would complement the ongoing development of the AEGIS OA weapon system that is projected for deployment of FY 10 DDG Modernization platforms and FY 08 CG Modernization platforms. Funding will be used to initiate the redesign and development of the MK 41 VLS Launch Control System Scope which would include defining system requirements, design, software prototyping, migration of the ICU processor to a processor favored by Aegis, Migration of MECS to Posix-compliant Operation System (OS), Implementation of new LCS software using common functions. This migration to a common processor and operating system will meet both DoD and USN OA Category 3 requirements.

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: | |
|---|------------------------|-----------------------|----------------------|------------|
| | | | | ruary 2005 |
| PROPRIATION/BUDGET ACTIVITY | | PROJECT NUMBER AND N | IAME | |
| T&E, N / BA-5 | | 9559/MK-41 VLS Open A | rchitecture Upgrades | |
| Accomplishments/Planned Program | | | | |
| Accomplishments/r lanned r rogram | | | | |
| | FY04 | FY05 | FY06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost | | 2.937 | | |
| RDT&E Articles Quantity | | | | |
| | | | | |
| FY05 - Initiate the redesign and requirement developm | ent of the MK 41 VLS L | aunch Control System. | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Г | FY 04 | FY 05 | FY 06 | FY 07 |
| A | 1104 | 1 1 00 | 1100 | 1107 |
| IAccomplishments/Effort/Subtotal Cost | | | | |
| Accomplishments/Effort/Subtotal Cost | | | | |
| RDT&E Articles Quantity | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | FY 04 | FY05 | FY06 | FY 07 |
| RDT&E Articles Quantity | FY 04 | FY05 | FY06 | FY 07 |
| RDT&E Articles Quantity Accomplishments/Effort/Subtotal Cost | FY 04 | FY05 | FY06 | FY 07 |
| RDT&E Articles Quantity | FY 04 | FY05 | FY06 | FY 07 |

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Project Justification | | | | | I | DATE: |
|---|-----------------------|------------------|------------------|---------------|-------------|---------------------|
| | | | | | | February 2005 |
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT NU | MBER AND NAME | | PROJECT NUMI | BER AND NA | AME |
| RDT&E, N / BA-5 | 0604366N/STANDARD MIS | SSILE IMPROVEMEN | TS | 9559/MK-41 VL | _S Open Arc | chitecture Upgrades |
| C. PROGRAM CHANGE SUMMARY: | | | | | | |
| Funding: Previous FY06/07OSD Budget: (FY06/07 OSD C | Controls) | FY 2004 | FY 2005 3.000 | FY 2006 | FY 2007 | |
| President Budget (FY06/07 Controls) Total Adjustments | | | -0.063 | | | |
| Summary of Adjustments | | | | | | |
| Undistributed Reduction Subtotal | | 0.000 | -0.063 -0.063 | 0.000 | 0.000 | |
| | | | | | | |
| Technical: TBD. | | | | | | |

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Project J | ustification | | DA | TE: |
|---|-----------------------------------|--|---------------------------|------------------|
| | | | | February 2005 |
| APPROPRIATION/BUDGET ACTIVITY | | PROGRAM ELEMENT NUMBER AND NAME | PROJECT NUMBER AND NAM | |
| RDT&E, N / B | A-5 | 0604366N/STANDARD MISSILE IMPROVEMENTS | 9559/MK-41 VLS Open Archi | tecture Upgrades |
| D. OTHER PROGRAM FUNDIN | G SUMMARY: Not Applicable | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| E. ACQUISITION STRATEGY: * | | | | |
| Not Applicable | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| F. MAJOR PERFORMERS: ** | | | | |
| Lockheed Martin | | | | |
| | | | | |
| | | | | |
| | | | | |
| * Not required for Budget Acti ** Required for DON and OSD sub | vities 1,2,3, and 6 omit only. | | | |

CLASSIFICATION: Unclassified

| Exhibit R-3 Cost Analysis (pa | ige 1) | | | | | | | | | | Februa | y 2005 | | |
|--|------------------------------|--------------------------------|-----------------------|---------------|------------------------|---------------|------------------------|---------------|------------------------|---------------|------------------------|---------------------|----------------------------------|--------------------------|
| APPROPRIATION/BUDGET ACTI | VITY | | RAM ELEMENT | | | | JMBER AND I | | | | | | | |
| RDT&E, N / BA-5 | 0 | 060436 | 6N/STANDARD MIS | SILE IMPROV | | 9559/MK-41 | VLS Open A | rchitecture L | | | IEV 07 | | 1 | Т |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | FY 06 Cost | FY 06 Award Date | FY 07 Cost | FY 07 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Primary Hardware Development | | | | | | | | | | | | | 0.000 |) |
| Ancillary Hardware Development | | | | | | | | | | | | | 0.000 |) |
| Component Development | | | | | | | | | | | | | 0.000 | |
| Design and Analysis | PR | LOCKHEED MARTIN | | | | 2.500 | 01/05 | | | | | | | |
| | WX | NSWC Dahlgren, VA | | | | 0.437 | 01/05 | | | | | Continuing | Continuing | 1 |
| | | | | | | | | | | | | Continuing | Continuing | |
| | | | | | | | | | | | | Continuing | Continuing | |
| | | | | | | | | | | | | Continuing | Continuing | 1 |
| | | | | | | | | | | | | Continuing | Continuing | |
| | | | | | | | | | | | | Continuing | Continuing | |
| | | | | | | | | | | | | Continuing | Continuing | 1 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | | | 0.000 | |
| Ship Integration | | | | | | | | | | | | Continuing | Continuing | , |
| Crisp integration | | | | | | | | | | | | Continuing | Continuing | 1 |
| Ship Suitability | | | | | | | | | | | | | 0.000 | |
| Systems Engineering | | | | | | | | | | | | | 0.000 | 1 |
| Training Development | | | | | | | | | | | | | 0.000 | , |
| | | | | | | | | | | | | | 0.000 | , |
| Licenses | | | | - | | | | | | | | | 0.000 | , |
| Tooling GFE | | | | | | | | | | | | | 0.000 | , |
| Award Fees | | | | | | | | | | | + | | 0.000 | , |
| | | | 0.00 | 0.000 | | 2.937 | | 0.00 | 20 | 0.000 | | O tii | | |
| Subtotal Product Development | | | 0.00 | 0.000 | J | 2.937 | `1 | 0.00 | 00 | 0.000 | 1 | Continuing | Continuing |] |
| Remarks: | | | | | | | | | | | | | | |
| | | | | _ | | | | | | | | | | |
| | | | | | | | | 1 | | | | Continuing | Continuing | |
| Development Support Software Development | | | | | | | | | | | | Continuing | 0.000 |) |
| | | | | | | | | | | | | Continuing | 0.000 |) |
| Software Development | | | | | | | | | | | | Continuing | 0.000 |) |
| Training Development | | | | | | | | | | | | Continuing | 0.000 |) |
| Software Development Training Development Integrated Logistics Support | | | | | | | | | | | | Continuing | 0.000 0.000 0.000 | |
| Software Development Training Development Integrated Logistics Support Configuration Management | | | | | | | | | | | | Continuing | 0.000 0.000 0.000 | |
| Software Development Training Development Integrated Logistics Support Configuration Management Technical Data | | | | | | | | | | | | Continuing | 0.000 0.000 0.000 0.000 |)) |

CLASSIFICATION: Unclassified

| Exhibit R-3 Cost Analysis (pa | | | | | | | | | | | Februa | ry 2005 | | |
|---------------------------------|--------|----------------------------|-------------|-------|----------|------------|---|-------|-------|-------|--------|------------|---------------|--------------|
| APPROPRIATION/BUDGET ACTIV | 'ITY | PROGRAM E | | | | PROJECT NU | | | | | | | | |
| RDT&E, N / BA-5 | | l l | ANDARD MISS | | | | 9559/MK-41 VLS Open Architecture Upgrades | | | | | | | |
| Cost Categories | | Performing | Total | | FY 04 | | FY 05 | | FY 06 | | FY 07 | | | |
| | | , | | | Award | | Award | | Award | FY 07 | Award | Cost to | Total | Target Value |
| | & Type | Location | Cost | Cost | Date | Cost | Date | Cost | Date | Cost | Date | Complete | Cost | of Contract |
| Developmental Test & Evaluation | WX | NSWC Port Hueneme, CA | | | | | | | | | | | #REF! | ! |
| | WX | White Sands Missile Range, | NM | | | | | | | | | | 0.000 |) |
| | WX | PMRF | | | | | | | | | | | 0.000 |) |
| Targets | | | | | | | | | | | | | | |
| Operational Test & Evaluation | | | | | | | | | | | | | 0.000 |) |
| Live Fire Test & Evaluation | | | | | | | | | | | | | 0.000 |) |
| Test Assets | | | | | | | | | | | | | 0.000 |) |
| Tooling | | | | | | | | | | | | | 0.000 |) |
| GFE | | | | | | | | | | | | | 0.000 |) |
| Award Fees | | | | | | | | | | | | | 0.000 |) |
| Subtotal T&E | | | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | | Continuing | Continuing | 1 |
| Sublutal Tae | | | 0.000 | 0.000 | <u> </u> | 0.000 | <u> </u> | 0.000 | l | 0.000 | 1 | Continuing | II Continuing |) <u> </u> |

| Contractor Engineering Support | CPAF | various | | | | | Continuing | Continuing | |
|--------------------------------|------|---------|--|--|--|--|------------|------------|--|
| Government Engineering Support | | | | | | | | 0.000 | |
| Program Management Support | | | | | | | | 0.000 | |
| Travel | | | | | | | Continuing | Continuing | |
| Labor (Research Personnel) | | | | | | | | 0.000 | |
| SBIR Assessment | | | | | | | | 0.000 | |
| Subtotal Management | | | | | | | Continuing | Continuing | |

Remarks:

| İ | | | | | | | | | |
|------------|--|--|--|-------|--|--|------------|------------|--|
| Total Cost | | | | 2.937 | | | Continuing | Continuing | |

Remarks:

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Budget Item Justification | | | | | | DATE: | | |
|---|---------|---------|---------|----------------|-----------------|-----------|---------------|---------|
| | | | | | | | February 2005 | |
| APPROPRIATION/BUDGET ACTIVITY | | | | R-1 ITEM NOMEN | ICLATURE | | | |
| RESEARCH DEVELOPMENT TEST & EVALUAT | BA-5 | | | 0604366N/STAND | ARD MISSILE IMP | ROVEMENTS | | |
| COST (\$ in Millions) | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
| Total PE Cost | 0.000 | 1.484 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9560/Real Time Image Processing - Silicon Brain | 0.000 | 1.484 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Real Time Image Processing-Silicon Brain is a three-dimensional artificial neural network processor with near human-level data processing capabilities for applications in smart munition problems like pattern recognition, clutter discrimination, target tracking and target identification. This phase III SBIR technology project may allow higher confidence track and ID functions against current and future threats. Hybrid analog processing may be applicable to both EO/IR and RF systems for missiles and UAVs.

CLASSIFICATION: Unclassified

| | | | DATE: | |
|--|-------|----------------------|-------|------------|
| | _ | I | | ruary 2005 |
| PROPRIATION/BUDGET ACTIVITY | | PROJECT NUMBER AND N | AME | |
| T&E, N / BA-5 | | 9560/Silicon Brain | | |
| Accomplishments/Dlawned Dressure | | | | |
| Accomplishments/Planned Program | | | | |
| | FY04 | FY05 | FY06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost | | 1.484 | | |
| RDT&E Articles Quantity | | | | |
| discrimination electronics platform | | | | |
| | | | | |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost | FY 04 | FY 05 | FY 06 | FY 07 |
| Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity | FY 04 | FY 05 | FY 06 | FY 07 |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| | FY 04 | FY 05 | FY 06 | FY 07 |
| RDT&E Articles Quantity | | | | |
| | | | | |

R-1 SHOPPING LIST - Item No. 106

UNCLASSIFIED

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT&E Project Justification | | | | | DATE: | |
|---|-------------------|----------------------|---------|-----------------|--------------|---------------|
| | | | | | | February 2005 |
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT | NUMBER AND NAME | | | BER AND NAME | |
| RDT&E, N / BA-5 | 0604366N/STANDARD | MISSILE IMPROVEMENTS | S | 9560/Silicon Br | ain | |
| C. PROGRAM CHANGE SUMMARY: | | | | | | |
| Funding: | | FY 2004 | FY 2005 | FY 2006 | FY 2007 | |
| Previous FY06/07OSD Budget: (FY06/07 O | SD Controls) | | 0.000 | | | |
| President Budget (FY06/07 Controls) | | | 1.484 | | | |
| Total Adjustments | | | 1.484 | | | |
| Summary of Adjustments | | | | | | |
| Management Reform | | | -0.016 | | | |
| Real Time Image Cong Add | | | 1.500 | | | |
| Subtotal | | 0.000 | 1.484 | 0.000 | 0.000 | |
| | | | | | | |
| Schedule: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Technical: TBD. | | | | | | |
| | | | | | | |
| | | | | | | |
| | | SHODDING LIST. Ito | N. 40 | | | |

CLASSIFICATION: Unclassified

| EXHIBIT R-2a, RDT& | E Project Justification | | DATE: | |
|---------------------|--------------------------------|--|-------------------------|---------------|
| | | | | February 2005 |
| APPROPRIATION/BUDG | | PROGRAM ELEMENT NUMBER AND NAME | PROJECT NUMBER AND NAME | |
| RDT&E, N / | BA-5 | 0604366N/STANDARD MISSILE IMPROVEMENTS | 9560/Silicon Brain | |
| D OTHER PROG | RAM FUNDING SUMMARY: Not | Annlicable | | |
| D. OTHER I ROOF | CAM I ONDING COMMANT. NOU | принаме | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| E. ACQUISITION ST | RATEGY: * | | | |
| Not Applicable | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| F. MAJOR PERFOR | MERS: ** | | | |
| NSWC/Dahlg | ren Dahlgren, Virginia | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| * Not required for | Budget Activities 1,2,3, and 6 | | | |
| ** Required for DON | I and OSD submit only. | | | |
| | | | | |

CLASSIFICATION: Unclassified

| | Exhibit R-3 Cost An | | | | IDDOODAME | LEMENT | | | IDDO IECT NI | IMPED AND | NIANT | | | геыша | ry 2005 | | |
|--|---|-------------------|--------|------------|--------------|---------------|---------------|----------------|--------------|----------------|--------|-------|-------|-------|------------|---|--------------------------|
| Contract Reforming Method Activity & Pry Fry 04 Avand Fry 05 Date Cost Date Date Date Date Date Date Date Da | | | 111 | | | | SII E IMPROVI | EMENITO | | | NAIVIE | | | | | | |
| Ancillary Hardware Development | | BA-5 | Method | Activity & | 000430014/31 | Total PY s | FY 04 | FY 04 Award | FY 05 | FY 05 Award | | Award | | Award | | | Target Value of Contract |
| Continuing Con | rimary Hardware Deve | elopment | , | | | | | | | | | | | | · · | | |
| Component Comp | | | | | | | | | | | | | | | | | |
| Subtotal Product Development 0.000 0.000 1.484 0.000 0.000 Continuing Continuing | | | | | | | | | | | | | | | | | |
| Remarks: | esign and Analysis | | WX | NSWC/DD | | | | | 1.484 | 1 | | | | | | | |
| Remarks: | | | | | | | | | | | | | | | | | |
| Development Support | Subtotal Product Deve | lopment | | | | 0.000 | 0.000 | סן | 1.484 | 1 | 0.000 | סן | 0.000 | | Continuing | Continuing | |
| oftware Development 0.000 graining Development 0.000 stegrated Logistics Support 0.000 configuration Management 0.000 echnical Data 0.000 IFE 0.000 | Remarks: | | | | | | | | | | | | | | | | |
| Training Development 0.000 Integrated Logistics Support 0.000 Configuration Management 0.000 Technical Data 0.000 GFE 0.000 | | • | I | T | | ı | | | | ı | | | | 1 | Continuing | Continuing | ıl . |
| Configuration Management | Development Support | | | | | | | 1 | | | | 1 | | | Continuing | | |
| Configuration Management 0.000 Sechnical Data 0.000 SFE 0.000 | Development Support | nt | | | | | | | | | | | | | Continuing | 0.000 |) |
| echnical Data 0.000 SFE 0.000 | Development Support oftware Developmer iraining Developmen | nt t | | | | | | | | | | | | | Continuing | 0.000 |) |
| FE 0.000 | Development Support oftware Developmer raining Developmen ntegrated Logistics S | nt t upport | | | | | | | | | | | | | Continuing | 0.000 0.000 0.000 |) |
| ward Fees 0.000 | Development Support oftware Developmer raining Developmen ntegrated Logistics S configuration Manage | nt t upport | | | | | | | | | | | | | Continuing | 0.000 0.000 0.000 | |
| | Development Support oftware Developmer raining Developmen ntegrated Logistics S configuration Manage dechnical Data | nt t upport | | | | | | | | | | | | | Continuing | 0.000 0.000 0.000 0.000 | |
| Subtotal Support 0.000 0.000 0.000 0.000 0.000 Continuing Continuing | Development Support Software Developmer Training Developmen Integrated Logistics S Configuration Manage Technical Data | nt t upport | | | | | | | | | | | | | Continuing | 0.000 0.000 0.000 0.000 0.000 | |

CLASSIFICATION: Unclassified

| 5 1 1 1 1 D 0 0 | ۵) | | | | | | | DATE: | | | | | | |
|--|------------------------------|--------------------------------------|------------------------|---------------|------------------------|----------------------------|------------------------|---------------|------------------------|---------------|------------------------|---------------------|---------------|--------------------------|
| Exhibit R-3 Cost Analysis (page | | Innonnus | | | | Inno inot vii | | | | | Februar | ry 2005 | | |
| APPROPRIATION/BUDGET ACTIV RDT&E, N / BA-5 | IIY | PROGRAM E 0604366N/ST | LEMEN I ANDARD MISS | SILE IMPROV | EMENTS | PROJECT NU 9560/Silicon | | NAME | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 04 Cost | FY 04 Award Date | FY 05 Cost | FY 05 Award Date | FY 06 Cost | FY 06 Award Date | FY 07 Cost | FY 07 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| Developmental Test & Evaluation | WX | NSWC Port Hueneme, CA | | | | | | | | | | | #REF! | |
| | WX | White Sands Missile Range, | NM | | | | | | | | | | 0.000 | |
| | WX | PMRF | | | | | | | | | | | 0.000 | |
| Targets | | | | | | | | | | | | | | |
| Operational Test & Evaluation | | | | | | | | | | | | | 0.000 | |
| Live Fire Test & Evaluation | | | | | | | | | | | | | 0.000 | |
| Test Assets | | | | | | | | | | | | | 0.000 | |
| Tooling | | | | | | | | | | | | | 0.000 | |
| GFE | | | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | | | 0.000 | |
| Subtotal T&E | | | 0.000 | 0.00 | 0 | 0.000 | | 0.000 | | 0.000 | | Continuing | Continuing | |
| | | | | | | | | | | | | | | |
| Contractor Engineering Support | CPAF | various | | | | | | | | | | Continuing | Continuing | |
| Government Engineering Support | | | | | | | | | | | | | 0.000 | |
| Program Management Support | | | | | | | | | | | | | 0.000 | |
| Travel | | | | | | | | | | | | Continuing | Continuing | |
| Labor (Research Personnel) | | | | | | | | | | | | | 0.000 | |
| SBIR Assessment | | | | | | | | | | | | | 0.000 | |
| Subtotal Management | | | | | | | | | | | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | | | |
| Total Cost | | | | | | 1.484 | | | | | | Continuing | Continuing | |
| Remarks: | | | l | ı | | 1.404 | | J | | I I | 1 | Continuing | Continuing | l |
| remand. | | | | | | | | | | | | | | |