| EXHIBIT R-2, RDT&E Budget Item Justification | | | | | | | DATE: February 2008 | |
|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5 | | | | | | R-1 ITEM NOMENCLATURE<br>0604261N, ACOUSTIC SEARCH SENSORS | | |
| COST ($ in Millions) | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | |
| Total PE Cost | 45.789 | 18.658 | 45.790 | 39.042 | 38.510 | 31.335 | 16.963 | |
| 0480 ASW SENSORS & PROC | 8.312 | 17.863 | 45.790 | 39.042 | 38.510 | 31.335 | 16.963 | |
| 4017 ARPDD | 32.167 | | | | | | | |
| 9999 CONGRESSIONAL ADDS | 5.310 | .795 | | | | | | |

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

0480. The ASW Sensors and Processing project provides the tools and methods necessary to maintain naval superiority by preventing hostile submarines from disrupting the US Navy's ability to control the sea lines of communication and carry out their missions. This project encompasses the System Development and Demonstration (SDD) phase and the follow on increment of sensor systems to improve the mission effectiveness of airborne Anti-Submarine Warfare (ASW) platforms in cueing, search, localization, and track. Smaller and quieter threat submarines drive the requirement for continued advancement in ASW sensor capabilities for both blue water and littoral environments. The littoral regions of the world create an additional ASW challenge to overcome the increase in background clutter caused by the shallow water depth, high volume of shipping, and commercial radio frequency interference. Project 0480 provides funding for the engineering development of solutions that detect, classify, and track threat submarines. Efforts being funded during the period identified are the Extended Echo Ranging (EER)family of multi-static active systems. The development efforts include the Improved Extended Echo Ranging (IEER) multi-static search receiver sensor for active large area ASW search; the Advanced Extended Echo Ranging (AEER) active coherent (electronic) sound source, a new start in FY08, which provides a search and localization capability in all water environments and could eliminate current impulsive source safety, training, and Rules of Engagement restrictions; and Advanced Processing Builds (APB) which provide signal processing improvements to achieve increased target detection and classification capabilities. APB also includes efforts for providing common software and hardware solutions across all ASW platforms.

4017. The Automatic Radar Periscope Detection and Discrimination (ARPDD) Project provides a fully automated periscope detection, classification, and tracking capability to reliably detect periscopes and masts, and reliably discriminate periscopes from clutter and confusion targets. This capability is suitable for air and surface platforms. This project funds only the airborne application. ARPDD will be integrated into the MH-60R as directed by CNO ltr N782C1C/6U876009. Consequently, ARPDD funding in FY08-11 has been transferred to PE 0604216N for execution.

9999. Congressional Adds.

| EXHIBIT R-2, RDT&E Budget Item Justification | DATE: February 2008 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5 | R-1 ITEM NOMENCLATURE<br>0604261N, ACOUSTIC SEARCH SENSORS |

B. PROGRAM CHANGE SUMMARY

| Funding: | FY 2007 | FY 2008 | FY 2009 |
|---|---|---|---|
| Previous President's Budget: | 41.984 | 18.325 | 46.457 |
| Current President's Budget: | 45.789 | 18.658 | 45.790 |
| Total Adjustments | 3.805 | 0.333 | -0.667 |
| | | | |
| Summary of Adjustments | | | |
| Congressional Reductions | | | |
| Congressional Rescissions | | | |
| Congressional Undistributed Reductions | -0.738 | -0.192 | |
| Congressional Increases | | 0.800 | |
| Economic Assumptions | | | -0.306 |
| Miscellaneous Adjustments | 4.543 | -0.275 | -0.361 |
| Subtotal | 3.805 | 0.333 | -0.667 |

Schedule: 0480 - Multi Static Active (Impulsive). Added APB (3) in 1Q/13 to show contract milestone. Added APB (3) S/W release in 4Q/12 and APB (3) SQT in 2Q/12 for more accurate planning.

Multi Static Active (Coherent). Moved Milestone C from 4Q/11 to 4Q/10. Removed H/W EDM (blk 1) as it was entered as a duplicate. Moved H/W EDM Increment 2 to 2Q/13 and properly named it for a more accurate schedule. Renamed H/W EDM (blk 1) to H/W EDM (Increment 1). Renamed FRP to FRP (Increment 1). Renamed MS B (blk 2) to MS B (Increment 2). Renamed CDR (blk 1) to CDR (Increment 1). Renamed Integration S/W Delivery (blk 1) to Integration S/W Delivery (Increment 1). Renamed Commence S/W and H/W Integrated Flt Test (blk 1) to Commence S/W and H/W Integrated Flt Test (Increment 1). Renamed OT (blk 1) to OT (Increment 1).

4017 - N/A.

Technical: 0480 - N/A
4017 - N/A

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2008 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME<br>0604261N, ACOUSTIC SEARCH SENSORS | PROJECT NUMBER AND NAME<br>0480, ASW SENSORS & PROC | |

| COST ($ in Millions) | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | |
|---|---|---|---|---|---|---|---|---|
| 0480 ASW SENSORS & PROC | 8.312 | 17.863 | 45.790 | 39.042 | 38.510 | 31.335 | 16.963 | |
| RDT&E Articles Qty | | 300 | 300 | 300 | 300 | 300 | 300 | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The ASW Sensors and Processing project provides the tools and methods necessary to maintain naval superiority by preventing hostile submarines from disrupting the US Navy's ability to control the sea lines of communication and carry out their missions. This project encompasses the System Development and Demonstration (SDD) phase and the follow on increment of sensor systems to improve the mission effectiveness of airborne Anti-Submarine Warfare (ASW) platforms in cueing, search, localization, and track. Smaller and quieter threat submarines drive the requirement for continued advancement in ASW sensor capabilities for both blue water and littoral environments. The littoral regions of the world create an additional ASW challenge to overcome the increase in background clutter caused by the shallow water depth, high volume of shipping, and commercial radio frequency interference. Project 0480 provides funding for the engineering development of solutions that detect, classify, and track threat submarines. Efforts being funded during the period identified are the Extended Echo Ranging (EER)family of multi-static active systems. The development efforts include the Improved Extended Echo Ranging (IEER) multi-static search receiver sensor for active large area ASW search; the Advanced Extended Echo Ranging (AEER) active coherent (electronic) sound source, a new start in FY08, which provides a search and localization capability in all water environments and could eliminate current impulsive source safety, training, and Rules of Engagement restrictions; and Advanced Processing Builds (APB) which provide signal processing improvements to achieve increased target detection and classification capabilities. APB also includes efforts for providing common software and hardware solutions across all ASW platforms. The 1800 sonobuoy test articles in FY08/13 will support software and hardware integration flight tests and Technical Evaluation (TECHEVAL)/Operational Evaluation (OPEVAL) for AEER Increment 1 and Increment 2 respectively.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

| Deliver IEER (1 & 2) | FY 2007 | FY 2008 | FY 2009 |
|---|---|---|---|
| Accomplishments / Effort / Sub-total Cost | 8.312 | 7.863 | 8.505 |
| RDT&E Articles Qty | | | |
| | | | |

Software development, integration, and test for Multi-Static ASW (MSA) sensor systems. Provides P-3 platform integration of multi-static technology improvements allowing increased weapons system efficiency and decreased fleet operator workload in the littoral ASW mission.

| Commence AEER | FY 2007 | FY 2008 | FY 2009 |
|---|---|---|---|
| Accomplishments / Effort / Sub-total Cost | | 10.000 | 37.285 |
| RDT&E Articles Qty | | 300 | 300 |
| | | | |

New start program in FY08 to develop a coherent source that will satisfy the search and localization requirement in the harsh, shallow water littorals.

| EXHIBIT R-2a, RDT&E Project Justification | | DATE: February 2008 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME<br>0604261N, ACOUSTIC SEARCH SENSORS | PROJECT NUMBER AND NAME<br>0480, ASW SENSORS & PROC |

| C. OTHER PROGRAM FUNDING SUMMARY: | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| (U) OPN (404800) AN/SSQ-110 | 1.1 | 1.2 | 0.9 | | | | | | |
| (U) P.E. 0603254N (ASW Systems Development) | | | | | | | | | |

D. ACQUISITION STRATEGY:

The integration of Multi-Static ASW (MSA) into increased number of P-3 Aircraft can be achieved as an option under the current MSA contracts. Various alternatives of MSA implementation are also being investigated that could require Full and Open competition.

| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | | | | DATE: February 2008 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | | PROGRAM ELEMENT<br>0604261N, ACOUSTIC SEARCH SENSORS | | | | PROJECT NUMBER AND NAME<br>0480, ASW SENSORS & PROC | | | | | | | |
| Cost Categories | Contract Method & Type | Performing Activity & Location | Total PY s Cost | FY 2007 Cost | FY 2007 Award Date | FY 2008 Cost | FY 2008 Award Date | FY 2009 Cost | FY 2009 Award Date | Cost to Complete | Total Cost | Target Value of Contract |
| PRODUCT DEVELOPMENT | | | | | | | | | | | | |
| Primary Hardware Development | TBD | TBD | 1.000 | | | 3.500 | 01/08 | 7.500 | 10/08 | 13.100 | 25.100 | 25.100 |
| SUBTOTAL PRODUCT DEVELOPMENT | | | 1.000 | | | 3.500 | | 7.500 | | 13.100 | 25.100 | |

Remarks:

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SUPPORT | | | | | | | | | | | | |
| Software Development (Phase II) | WX | NAWCAD, PATUXENT RIVER MD | 4.595 | 2.100 | 10/06 | 2.100 | 10/07 | 1.473 | 10/08 | 12.164 | 22.432 | |
| Software Development (Phase II) | TBD | TBD | | | | | | 10.500 | 10/08 | 19.000 | 29.500 | 29.500 |
| Studies & Analyses | WX | NAWCAD, PATUXENT RIVER MD | | | | 4.731 | 10/07 | 4.524 | 10/08 | 6.419 | 15.674 | |
| Studies & Analyses | C-CPFF | LM CORP. MANASSAS, VA | .200 | | | | | | | | .200 | .200 |
| Technical Data | WX | NAWCAD, PATUXENT RIVER MD | 7.329 | .900 | 10/06 | | | .500 | 10/08 | 6.150 | 14.879 | |
| | | | | | | | | | | | | |
| SUBTOTAL SUPPORT | | | 12.124 | 3.000 | | 6.831 | | 16.997 | | 43.733 | 82.685 | |

Remarks:

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TEST & EVALUATION | | | | | | | | | | | | |
| Dev Test & Eval | WX | NAWCAD, PATUXENT RIVER MD | 4.350 | .750 | 10/06 | 1.000 | 10/07 | 3.500 | 10/08 | 15.550 | 25.150 | |
| SUBTOTAL TEST & EVALUATION | | | 4.350 | .750 | | 1.000 | | 3.500 | | 15.550 | 25.150 | |

Remarks:

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MANAGEMENT | | | | | | | | | | | | |
| Contractor Engineering Support | VARIOUS | VARIOUS | 9.144 | 2.295 | 10/06 | 2.370 | 12/07 | 6.290 | 11/08 | 20.228 | 40.327 | 40.327 |
| Government Engineering Support | WX | NAWCAD, PATUXENT RIVER MD | 66.251 | .935 | 10/06 | 2.303 | 10/07 | 6.886 | 10/08 | 20.623 | 96.998 | |
| Program Mgmt Support (Cont.) | VARIOUS | VARIOUS | 41.183 | 1.132 | 11/06 | .558 | 12/07 | 1.385 | 11/08 | 3.785 | 48.043 | 48.043 |
| Program Mgmt Support (Gov.) | WX | NAWCAD, PATUXENT RIVER MD | 7.363 | .200 | 10/06 | 1.301 | 10/07 | 3.232 | 10/08 | 8.831 | 20.927 | |
| SUBTOTAL MANAGEMENT | | | 123.941 | 4.562 | | 6.532 | | 17.793 | | 53.467 | 206.295 | |

Remarks:

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Cost | | | 141.415 | 8.312 | | 17.863 | | 45.790 | | 125.850 | 339.230 | |

Remarks:

**CLASSIFICATION:**

| EXHIBIT R4, Schedule Profile<br>Multi-Static Active (Impulsive) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | DATE: February 2008 | |
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | | | | | | | | | PROGRAM ELEMENT NUMBER AND NAME<br>0604261N, ACOUSTIC SEARCH SENSORS | | | | | | | | | | | | PROJECT NUMBER AND NAME<br>0480, ASW SENSORS & PROC | | | | | | | | | | |
| Fiscal Year | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | FY 2012 | | | | FY 2013 | | | | | | | |
| | 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** | | | | | MSA Integration Contract | | | | APB (1) INTEGRATION CONTRACT | | | | | | | | APB (2) INTEGRATION CONTRACT | | | | | | | | | APB (3) INTEGRATION CONTRACT | | | | | | |
| Prototype Phase | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| System Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EDM Delivery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Software Development/Integration | | | | | | | | APB (1) S/W release | | | | | | | | APB (2) S/W RELEASE | | | | | | | | APB (3) S/W RELEASE | | | | | | | | |
| **Test & Evaluation Milestones**<br>Development Test<br>Operational Test | | MSA Integration TECH EVAL | | MSA Integration OPEVAL | | APB (1) SQT | | | | | | | | APB (2) SQT | | | | | | | | APB (3) SQT | | | | | | | | | | |
| **Production Milestones** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deliveries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**CLASSIFICATION:**

| Exhibit R-4a, Schedule Detail<br>Multi-Static Active (Impulsive) | | | | | DATE:<br>February 2008 | | | |
|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | PROGRAM ELEMENT<br>0604261N, ACOUSTIC SEARCH SENSORS | | | | PROJECT NUMBER AND NAME<br>0480, ASW SENSORS & PROC | | | |
| Schedule Profile | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | |
| | | | | | | | | |
| Integration Contract | | 1Q | 1Q | | 1Q | | 1Q | |
| Software Delivery APB (1), (2), (3) | | 4Q | | 4Q | | 4Q | | |
| Technical Evaluation (TECHEVAL) | 2Q | | | | | | | |
| Software Qualification Test (SQT) | | 2Q | | 2Q | | 2Q | | |
| Operational Evaluation (OPEVAL) | 4Q | | | | | | | |

**CLASSIFICATION:**

EXHIBIT R4, Schedule Profile
Multi-Static Active (Coherent)

DATE: February 2008

| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT NUMBER AND NAME | PROJECT NUMBER AND NAME |
|---|---|---|
| RDT&E,N / BA-5 | 0604261N, ACOUSTIC SEARCH SENSORS | 0480, ASW SENSORS & PROC |

| Fiscal Year | FY 2007 | | | | FY 2008 | | | | FY 2009 | | | | FY 2010 | | | | FY 2011 | | | | FY 2012 | | | | FY 2013 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 | | | | | | | | MS B (Inc 2) | | | | | | | | |
| System Development Localization | | | | | | | | | | | | CDR (Inc 1) | | | | | | | | | | | | | | | | | | | | |
| EDM Delivery | | | | | | | | | | | | | | H/W EDM (Inc 1) | | | | | | | | | | | | H/W EDM (Inc 2) | | | | | | |
| Software Integration | | | | | | | | | | | | | | | Integration S/W Delivery (Inc 1) | | | | | | | | | | | | | | | | | |
| **Test & Evaluation Milestones** | | | | | | | | | | | | | | | | Commence S/W and H/W Integrated Flt Test (Inc 1) | | | | | | | | | | | | | | | | |
| Development Test | | | | | | | | | | | | | | | | | | | OT (Inc 1) | | | | | | | | | | | | | |
| Operational Test | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Production Milestones** | | | | | | | | | | | | | | | | | | | | | FRP (Inc 1) | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Note: AEER, is a spiral upgrade development effort consisting of two block builds. Block 1 is to develop and produce a Coherent Source buoy to provide a multi-static active localization system capability. Block 2 will increase the source level and provide a search capability.

**CLASSIFICATION:**

| Exhibit R-4a, Schedule Detail<br>Multi-Static Active (Coherent) | | | | | DATE:<br>February 2008 | | | |
|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | PROGRAM ELEMENT<br>0604261N, ACOUSTIC SEARCH SENSORS | | | | PROJECT NUMBER AND NAME<br>0480, ASW SENSORS & PROC | | | |
| Schedule Profile | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | |
| Milestone B (MS B) | | | 1Q | | | | | |
| Critical Design Review (CDR) Increment 1 | | | 4Q | | | | | |
| Eng Dev Model (H/W EDM) Increment 1 | | | | 2Q | | | | |
| Eng Dev Model (H/W EDM) Increment 2 | | | | | | | 2Q | |
| Integration Software Delivery Increment 1 | | | | 3Q | | | | |
| Development Test Increment 1 | | | | 4Q | | | | |
| Operational Test Increment 1 | | | | | 3Q | | | |
| Milestone B (MS B) Increment 2 | | | | | | 4Q | | |
| Milestone C (MS C) | | | | 4Q | | | | |
| Full Rate Production (FRP) Increment 1 | | | | | | 1Q | | |

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2008 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME<br>0604261N, ACOUSTIC SEARCH SENSORS | PROJECT NUMBER AND NAME<br>4017, ARPDD | |

| COST ($ in Millions) | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | |
|---|---|---|---|---|---|---|---|---|
| 4017 ARPDD | 32.167 | | | | | | | |
| RDT&E Articles Qty | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Automatic Radar Periscope Detection and Discrimination (ARPDD) Project provides a fully automated periscope detection, classification, and tracking capability to reliably detect periscopes and masts, and reliably discriminate periscopes from clutter and confusion targets. This capability is suitable for air and surface platforms. This project funds only the airborne application. This capability is essential for effective detection of submarines in congested Littoral areas. This funding is for engineering development and evolutionary application of the ARPDD capability to Airborne radars. ARPDD will be integrated into the MH-60R as directed by CNO N782C1C/6U876009. Consequently, ARPDD funding in FY08-11 has been transferred to PE 0604216N for execution.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

| Project planning/acquisition document preparation/tech trade off studies/SOW | FY 2007 | FY 2008 | FY 2009 | FY 2010 |
|---|---|---|---|---|
| Accomplishments / Effort / Sub-total Cost | 32.167 | | | |
| RDT&E Articles Qty | | | | |
| | | | | |

ARPDD is a follow-on to a Science and Technology program previously funded by the Office of Naval Research in PE0603747N. Funding is being used for project planning, acquistion documentation preparation, performing technical trade-off studies, developing specifications, and a Statement of Work in preparation for awarding a contract for development of an airborne ARPDD capability. Funding will be used to award a development contract for ARPDD System Development and Demonstration (SDD) and associated government support.

| EXHIBIT R-2a, RDT&E Project Justification | | DATE: February 2008 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME<br>0604261N, ACOUSTIC SEARCH SENSORS | PROJECT NUMBER AND NAME<br>4017, ARPDD |

C. OTHER PROGRAM FUNDING SUMMARY:
N/A

D. ACQUISITION STRATEGY:

Analyze merits of sole source versus competitive procurement. Explore Alternatives. Award prime contract to Lockheed Martin. Technical support will be provided by NAWCWD (China Lake) and JHU/APL.

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2008 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>RDT&E,N / BA-5 | PROGRAM ELEMENT NUMBER AND NAME<br>0604261N, ACOUSTIC SEARCH SENSORS | PROJECT NUMBER AND NAME<br>9999, Congressional Adds | |

| COST ($ in Millions) | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY2013 |
|---|---|---|---|---|---|---|---|
| 9999 Congressional Adds | 5.310 | .795 | | | | | |
| RDT&E Articles Qty | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

9999. Congressional Adds.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Development & test sonobuoy prototype

| 9773C | FY 2007 | FY 2008 | FY 2009 |
|---|---|---|---|
| Accomplishments / Effort / Sub-total Cost | .984 | | |
| RDT&E Articles Qty | | | |

Acoustic Environmental Sensor System. Continue development and testing of A-plus sized sonobuoy prototype and in-buoy processing software, high dynamic range omni directional hydrophone, sound velocity, profiling, data collection ability and reverberation data collection capability.

Provide software enhancements and technical refresh to AN/USQ-78B

| 9A31N | FY 2007 | FY 2008 | FY 2009 |
|---|---|---|---|
| Accomplishments / Effort / Sub-total Cost | 4.326 | | |
| RDT&E Articles Qty | | | |

AN/USQ-78B Acoustic Processor Improvements. Provides upgrades to the AN/USQ-78B Airborne Acoustic Processor System through the Advanced Rapid COTS Insertion (ARCI)/Advanced Processing Builds (APB) process. The development will provide common, open-architecture (OA) standards-based solutions through software enhancements and technical refresh to increase the AN/USQ-78B system performance to meet the ASW demands against small hostile submarines.

Evaluate the ASW capability of the Deep Extended Echo Ranging system

| 9999 (TBD) | FY 2007 | FY 2008 | FY 2009 |
|---|---|---|---|
| Accomplishments / Effort / Sub-total Cost | | .795 | |
| RDT&E Articles Qty | | | |

Deep Extended Echo Ranging (DEER) system. Evaluate the Anti-Submarine Warfare (ASW) capability of the Deep Extended Echo Ranging system which is employed in deep water environments where the Reliable Acoustic Path is present. This effort is consistent with the Navy's objective to provide a rapid search and area clearance capability.