Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603506N: Surface Ship Torpedo Defense

BA 4: Advanced Component Development & Prototypes (ACD&P)

| COST (\$ in Millions) | FY 2009 Actual | FY 2010 Estimate | FY 2011 Base Estimate | FY 2011 OCO Estimate | FY 2011 Total Estimate | FY 2012 Estimate | FY 2013 Estimate | FY 2014 Estimate | FY 2015 Estimate | Cost To Complete | Total Cost |
|--|-------------------|---------------------|-----------------------------|----------------------------|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| Total Program Element | 48.215 | 67.257 | 57.796 | 0.000 | 57.796 | 60.842 | 51.937 | 43.003 | 32.091 | Continuing | Continuing |
| 0225: Surface Ship Torpedo Defense (SSTD) | 45.662 | 57.299 | 57.796 | 0.000 | 57.796 | 60.842 | 51.937 | 43.003 | 32.091 | Continuing | Continuing |
| 9999: Congressional Adds | 2.553 | 9.958 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 45.729 |

A. Mission Description and Budget Item Justification

The Surface Ship Torpedo Defense (STTD), Project 0225, develops a detect to engage hardkill torpedo defense system called the Anti-Torpedo Torpedo Defense System (ATTDS) as specified in the Draft ATTDS Capability Development Document (CDD). This program uses an evolutionary acquisition strategy of providing incremental surface ship torpedo defense

capability by implementing first on Cruisers and Destroyers (CRUDES) already equipped with sonar systems, fire control systems and launchers.

At-sea demonstrations of the Torpedo Detection Classification and Localization (TDCL) systems conducted FY06 through FY09 led to a CRUDES TDCL draft system specification in FY09.

At sea testing of the EDM-1 design of the Anti-Torpedo Torpedo (ATT) variant of the Common Very Lightweight Torpedo (CVLWT) in FY07 through FY09 facilitates completion of the EDM-2 design in FY10. The ATT will be shipped, stowed and launched from an all up round canister known as the Countermeasure Anti-Torpedo (CAT).

In FY10, an EDM of the CRUDES ship systems will be developed. The systems will include, a command and control system with user interface, a modified Surface Vessel Torpedo Tube launcher, and a canistered ATT. The TDCL system will utilize a sensor set added to the AN/SLQ-25 (NIXIE) System, processing in the AN/SQQ-89, as well as the hull mounted sonar already employed on these ships. The development of the ATT is the first derivative of the CVLWT as an acquisition program. The CAT and the TDCL development are closely linked with the ONR Sea Shield Future Naval Capability (FNC) programs that provide advanced technology inserts at key transition points.

FY09 Congressional Add-Project 9D21A: Develop the Open Architecture (OA) supportability processes, methods, and tools required to facilitate the real-time capture and cataloging of sailor training, performance, and vocational skills data.

FY09 Congressional Add-Project 9D22A: Expand technology development of mobile countermeasures used for Surface Ship Torpedo Defense including device engineering, fabrication and testing capabilities to assess the effectiveness of Next Generation (mobile) Countermeasures.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603506N: Surface Ship Torpedo Defense

BA 4: Advanced Component Development & Prototypes (ACD&P)

FY10 Congressional Add-Project 10C097, Continuous Active Sonar for Torpedo DCL Systems: Adapt Continuous Active Sonar (CAS) and other active and passive sonar technologies that have proved very effective for active ASW applications, to improve TDCL capabilities and extend ATTDS coverage against most stressing emergent threats.

FY10 Congressional Add-Project 10C096, AN/SLQ-25D Integration: Provide integration of the SLQ-25D countermeasure system with the Anti-Torpedo Torpedo Defense System. This integration includes development of interfaces with Ship's Sonar and Fire Control systems, as well as integration with new towed sensors and integration with the ship itself.

B. Program Change Summary (\$ in Millions)

| | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
|---|---------|---------|---------------------|-------------|---------------|
| Previous President's Budget | 51.545 | 57.538 | 0.000 | 0.000 | 0.000 |
| Current President's Budget | 48.215 | 67.257 | 57.796 | 0.000 | 57.796 |
| Total Adjustments | -3.330 | 9.719 | 57.796 | 0.000 | 57.796 |
| Congressional General Reductions | | -0.281 | | | |
| Congressional Directed Reductions | | 0.000 | | | |
| Congressional Rescissions | 0.000 | 0.000 | | | |
| Congressional Adds | | 10.000 | | | |
| Congressional Directed Transfers | | 0.000 | | | |
| Reprogrammings | -2.115 | 0.000 | | | |
| SBIR/STTR Transfer | -1.215 | 0.000 | | | |
| Program Adjustments | 0.000 | 0.000 | 57.796 | 0.000 | 57.796 |

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: Congressional Adds

Congressional Add: AN/SLQ-25D Integration

Congressional Add: Continuous Active Sonar for Torpedo DCL Systems

Congressional Add: Supportability Training Services Infrastructure

Congressional Add: Mobile Acoustic Decoys for Surface Ship Defense

| | FY 2009 | FY 2010 |
|---|---------|---------|
| | | |
| | 0.000 | 6.373 |
| | 0.000 | 3.585 |
| | 1.596 | 0.000 |
| | 0.957 | 0.000 |
| 9 | 2.553 | 9.958 |
| l | | |

Congressional Add Subtotals for Project: 9999

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603506N: Surface Ship Torpedo Defense

BA 4: Advanced Component Development & Prototypes (ACD&P)

Congressional Add Details (\$ in Millions, and Includes General Reductions)

FY 2009 FY 2010 2.553 9.958

Congressional Add Totals for all Projects

Change Summary Explanation

Technical: Not applicable. Schedule: Not applicable.

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

| EXHIBIT R-2A, RD1&E Project Jus | stification: P | B 2011 Navy | / | | | | | | DAIE: Feb | ruary 2010 | |
|---|--|-------------|---------|-----------------|--------------------|-------------|------------|-----------------------------|--------------|-------------|----------|
| APPROPRIATION/BUDGET ACTI | PROPRIATION/BUDGET ACTIVITY 19: Research, Development, Test & Evaluation, Navv | | | | | | | PROJECT | | | |
| 1319: Research, Development, Tes | 19: Research, Development, Test & Evaluation, Navy A: Advanced Component Development & Prototypes (ACD&P) | | | | 6N: <i>Surface</i> | Ship Torped | lo Defense | 0225: Surfa | ace Ship Tor | pedo Defens | e (SSTD) |
| BA 4: Advanced Component Development & Prototypes (ACD&P) | | | | | | | | | | | |
| | | | FY 2011 | FY 2011 | FY 2011 | | | | | | |
| COST (\$ in Millions) | FY 2009 | FY 2010 | Base | OCO Estimato | Total | FY 2012 | FY 2013 | P13 FY 2014 FY 2015 Cost To | | | |

| COST (\$ in Millions) | FY 2009 Actual | FY 2010 Estimate | FY 2011 Base Estimate | FY 2011 OCO Estimate | FY 2011 Total Estimate | FY 2012 Estimate | FY 2013 Estimate | FY 2014 Estimate | FY 2015 Estimate | Cost To Complete | Total Cost |
|--|-------------------|---------------------|-----------------------------|----------------------------|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| 0225: Surface Ship Torpedo Defense (SSTD) | 45.662 | 57.299 | 57.796 | 0.000 | 57.796 | 60.842 | 51.937 | 43.003 | 32.091 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

A. Mission Description and Budget Item Justification

Surface Ship Torpedo Defense, Project 0225, develops a detect to engage hardkill torpedo defense system called the Anti-Torpedo Torpedo Defense System (ATTDS) as specified in the Capability Development Document (CDD) for a Cruiser and Destroyer (CRUDES) based Torpedo Defense System. This development approach uses an Evolutionary Acquisition strategy of providing incremental surface ship torpedo defense capability by implementing first on ships already equipped with sonar and fire control systems and launchers.

Subsequent increments will install this capability on high value units.

B. Accomplishments/Planned Program (\$ in Millions)

| | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
|---|---------|---------|-----------------|----------------|------------------|
| ANTI-TORPEDO TORPEDO (ATT): | 36.425 | 41.299 | 41.796 | 0.000 | 41.796 |
| FY 2009 Accomplishments: Continue ATT EDM-2 Design. Continue ATT Launcher development. Continue CDD signature process, PLCCE/ICE, and Acquisition Program Baseline. FY 2010 Plans: Begin ATT EDM-2 Builds. Perform Critical Design Review (CDR). Achieve Milestone B. Complete | | | | | |
| TEMP signature process, demonstrate ATT Technology Readiness Level. | | | | | |
| FY 2011 Base Plans: | | | | | |
| Continue ATT EDM-2 Builds. | | | | | |
| SHIP SYSTEMS: | 9.000 | 16.000 | 16.000 | 0.000 | 16.000 |

| | | | | UNCLAS | | | | | | | |
|--|-------------------------------|-------------------------|-----------------|-----------------------------------|------------------|-------------|-----------|------------------------|-----------------|----------------|------------------|
| Exhibit R-2A, RDT&E Project Ju | stification: PB | 2011 Navy | | | | | | | DATE: Feb | ruary 2010 | |
| APPROPRIATION/BUDGET ACT 1319: Research, Development, Te BA 4: Advanced Component Deve | est & Evaluation | | | R-1 ITEM N 0 PE 0603506 | _ | _ | o Defense | PROJECT 0225: Surfa | ace Ship Torp | pedo Defens | e (SSTD) |
| B. Accomplishments/Planned Pr | rogram (\$ in N | lillions) | | | | | | ı | | | |
| • | | , | | | | | FY 2009 | FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total |
| FY 2009 Accomplishments: Conduct DDG-51 and HVU T Draft Spec. Initiate Ship Syste FY 2010 Plans: Conduct additional DDC-51 a Continue Ship System EDM E | em EDM Build. and HVU TDCL | Complete A test events. | TT EDM-1 to | esting. Ship Systems | EDM Desig | | | | | | |
| Complete Ship System EDM DEFENSE ACQUISITION WORK | • | | evel Testing |) . | | | 0.237 | 0.000 | 0.000 | 0.000 | 0.00 |
| FY 2009 Accomplishments: Funded Defense Acquisition | | | | | | | 0.207 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | | Accomplish | ments/Plann | ed Program | s Subtotals | 45.662 | 57.299 | 57.796 | 0.000 | 57.79 |
| C. Other Program Funding Sum | mary (\$ in Mill FY 2009 | ions) FY 2010 | FY 2011 Base | FY 2011 OCO | FY 2011 Total | FY 2012 | FY 2013 | FY 2014 | FY 2015 | Cost To | Total Cos |
| WPN/311300: Surface Ship Torpedo Defense | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 12.430 | 15.875 | 23.438 | 38.709 | 0.000 | 90.45 |
| | 20.821 | 10.153 | 2.206 | 0.000 | 2.206 | 8.310 | 18.011 | 19.748 | 19.844 | 0.000 | 99.093 |
| | | | | | | | | | | | |

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603506N: Surface Ship Torpedo Defense

0225: Surface Ship Torpedo Defense (SSTD)

C. Other Program Funding Summary (\$ in Millions)

FY 2011 FY 2011 FY 2011 **Cost To**

Line Item

FY 2009 FY 2010

oco Base

Total FY 2012 FY 2013

FY 2014 FY 2015 Complete Total Cost

OPN/221300: Surface Ship

Torpedo Defense

D. Acquisition Strategy

The project develops Surface Ship Torpedo Defense (SSTD) capabilities using an evolutionary acquisition incremental development approach. OPN: In the FY07 -FY09 time frame, the OPN funding upgrades the existing AN/SLQ-25A to an AN/SLQ-25C NIXIE through Engineering Change Proposals (ECPs) performed by the Original Equipment Manufacture (OEM) and includes

procurement and installation. The FY10 Milestone B approves the ATTDS as a system of systems to bring a hard kill torpedo defense system to surface ships. The EDM-1 Common Very Lightweight Torpedo (CVLWT) design brings in the hard-kill component of the ATTDS. The EDM-2 design, which began in FY08 and continues through FY09 and into FY10 will develop

the Canistered ATT as a Countermeasure Anti-Torpedo (CAT). EDM-2 units to support the System Development and demonstration phase of the program will be built by Applied Research Laboratory/Penn State University (ARL/PSU).

E. Performance Metrics

Probability of kill for the ATT Torpedo Detection Classification and Localization (TDCL) False Alert Rate TDCL probability of correct classification

ATTDS System Availability

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603506N: Surface Ship Torpedo Defense

0225: Surface Ship Torpedo Defense (SSTD)

Product Development (\$ in Millions)

| | | | | FY 2 | 2010 | FY 2 Ba | | FY 2 | | FY 2011 Total | | | |
|----------------------------------|------------------------------|--------------------------------------|---------------------------|--------|---------------|------------|---------------|-------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Systems Engineering | WR | NUWC Newport, RI | 17.889 | 8.400 | Feb 2010 | 8.400 | Dec 2010 | 0.000 | | 8.400 | Continuing | Continuing | Continuing |
| Systems Engineering ATT Dev. | C/CPFF | PSU/ARL State College, PA | 74.746 | 28.799 | Feb 2010 | 29.396 | Feb 2011 | 0.000 | | 29.396 | Continuing | Continuing | Continuing |
| Systems Engineering | C/CPFF | JHU/APL Baltimore , MD | 1.270 | 0.300 | Feb 2010 | 0.300 | Feb 2011 | 0.000 | | 0.300 | Continuing | Continuing | Continuing |
| Systems Engineering Warhead Dev. | WR | NSWC Indian Head, MD | 20.300 | 7.800 | Nov 2009 | 9.000 | Dec 2010 | 0.000 | | 9.000 | Continuing | Continuing | Continuing |
| Systems Engineering | WR | NUWC Keyport,WA | 10.126 | 3.300 | Oct 2009 | 4.300 | Dec 2010 | 0.000 | | 4.300 | Continuing | Continuing | Continuing |
| Systems Engineering TDCL | C/CPFF | Ultra Braintree, MA | 10.800 | 3.000 | Feb 2010 | 3.000 | Feb 2011 | 0.000 | | 3.000 | 0.000 | 16.800 | Continuing |
| Systems Engineering ATT | WR | ONR Not Specified | 1.235 | 0.100 | Jan 2010 | 0.100 | Jan 2011 | 0.000 | | 0.100 | Continuing | Continuing | Continuing |
| Systems Engineering TDCL | C/CPFF | AAC Hauppage, NY | 0.830 | 3.000 | Feb 2010 | 3.000 | Feb 2011 | 0.000 | | 3.000 | 0.000 | 6.830 | Continuing |
| Systems Engineering | WR | OPTEVFOR Norfolk, VA | 0.273 | 0.150 | Feb 2010 | 0.150 | Feb 2011 | 0.000 | | 0.150 | Continuing | Continuing | Continuing |
| Systems Engineering | C/CPFF | ArgonST Manassas, VA | 0.800 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 0.800 | Continuing |
| Systems Engineering TDCL | WR | NSWC Dahlgren, VA | 3.122 | 1.400 | Dec 2009 | 0.000 | | 0.000 | | 0.000 | 0.000 | 4.522 | Continuing |
| Systems Engineering TDCL | WR | SPAWAR San Diego, CA | 0.225 | 0.075 | Oct 2009 | 0.075 | Dec 2010 | 0.000 | | 0.075 | 0.000 | 0.375 | Continuing |
| Systems Engineering | C/CPFF | UT/ARL | 0.300 | 0.200 | Jan 2010 | 0.000 | | 0.000 | | 0.000 | 0.000 | 0.500 | Continuing |

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R-1 Line Item #33 Page 7 of 13

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603506N: Surface Ship Torpedo Defense

0225: Surface Ship Torpedo Defense (SSTD)

Product Development (\$ in Millions)

| Troduct Bevelopine | , (ψ | | | FY 20 | 010 | FY 2 Ba | | FY 2 | 2011 CO | FY 2011 Total | | | |
|--------------------|------------------------------|--------------------------------------|---------------------------|--------|---------------|------------|---------------|-------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| | | Not Specified | | | | | | | | | | | |
| | • | Subtotal | 141.916 | 56.524 | | 57.721 | | 0.000 | | 57.721 | | | |

Remarks

Management Services (\$ in Millions)

| | | | | FY 2 | 2010 | FY 2 Ba | - | FY 2 | | FY 2011 Total | | | |
|-------------------------------|------------------------------|--------------------------------------|---------------------------|-------|---------------|------------|---------------|-------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item | Contract Method & Type | Performing Activity & Location | Total Prior Years Cost | Cost | Award Date | Cost | Award Date | Cost | Award Date | Cost | Cost To Complete | Total Cost | Target Value of Contract |
| Program Management Support | C/FFP | EG&G Gaithersburg, Md. | 2.846 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 2.846 | Continuing |
| DAWDF | C/TBD | Not Specified Not Specified | 0.237 | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 0.237 | Continuing |
| Program Management Support | C/CPAF | Tech-Marine Burke, VA | 0.700 | 0.700 | Jan 2010 | 0.000 | | 0.000 | | 0.000 | 0.000 | 1.400 | Continuing |
| Travel | C/TBD | PMS 415 Not Specified | 0.335 | 0.075 | Feb 2010 | 0.075 | Nov 2010 | 0.000 | | 0.075 | 0.000 | 0.485 | Continuing |
| | | Subtotal | 4.118 | 0.775 | | 0.075 | | 0.000 | | 0.075 | 0.000 | 4.968 | |

Remarks

UNCLASSIFIED

R-1 Line Item #33 Page 8 of 13

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0603506N: Surface Ship Torpedo Defense

0225: Surface Ship Torpedo Defense (SSTD)

| | | | , | | | | | | | |
|---------------------|-------------|---------|--------|------|-------|------|---------|----------|------------|----------|
| | Total Drien | | EV. | 2044 | EV. | 2044 | EV 2044 | Coot To | | Target |
| | Total Prior | | | 2011 | FY 2 | - | FY 2011 | Cost To | | Value of |
| | Years Cost | FY 2010 | Ba | ise | 00 | co | Total | Complete | Total Cost | Contract |
| Project Cost Totals | 146.034 | 57.299 | 57.796 | | 0.000 | | 57.796 | | | |

Remarks

| Exhibit R-4, RDT&E So | hedule | Profile: PB 2 | 011 Navy | | | | | | | | | DAT | E: Febr | ruary 20 | 10 | |
|--|---------|---------------|----------------------------------|--------|----------------------------|--------|-------|------|--------|--------|-------------------------|------------------|----------------|------------------|--------------------|-------|
| APPROPRIATION/BUD 1319: <i>Research, Develo</i> BA 4: <i>Advanced Compo</i> | pment, | Test & Evalua | ntion, Navy Prototypes (ACD&F | P) | R-1 ITEM NO PE 0603506N | | _ | | do Def | ense | PROJI 0225: 3 | ECT Surface S | hip Torp | oedo De | fense (S | STD) |
| CLASSIFICATION: | | | | | UNCLASSIFIE | D | | | | | | | | | | |
| | | E) | XHIBIT R-4, SCH | EDUL | E PROFILE | (pag | ∋ 1) | | | | | | DATE: | | | |
| | | | | | 1 | | - | | | | | TPROJEC | | | ry 2010 Nd Name | |
| APPROPRIATION/ BU | JDGET A | ACTIVITY | RDTEN/ | BA 4 | PROGR. 0603506N/ | | | | | | | | 5/Surfa | | p Torpe | |
| | F | Y 09 | FY 10 | | FY 11 | | FY 12 | 2 | | FY | 13 | ı | Y 14 | | FY 1 | 5 |
| | 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 |
| Program Milestones | | | MSB | | System Demo Trial | | Msc | | Δ | рт/ от | Tests | | 0 |)T&E | | P IOC |
| | ED | M-2 DESIGN | | EDM | 1-2 BUILDS | | | | | | | | | | | |
| 6 3/4 FORM FACTOR/ ANTI TORPEDO TORPEDO (ATT) | | | CDD | | CT2 | -1 | CT2-2 | CT2- | 2 | CT2-3 | | | | | | |
| SHIP SYSTEMS DCL SYSTEM, | | DDG D | emo | | | | | | | | | | | | | |
| COMMAND & CONTROL, LAUNCHER | SHIP | SYS. EDM D | | | | | | | | | | _ | | | | |
| | | | SHIP SYS. EDM | 1 BUIL | D | ST- | | | | | | ST-2 | | | | |
| | | | | | R-1 Line Item | No 167 | 7 | | | SSIFIC | :ATION: | | | XHIBIT SCHEDU | R4 ILE PRO | FILE |

UNCLASSIFIED

R-1 Line Item #33 Page 10 of 13

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603506N: Surface Ship Torpedo Defense

PROJECT

0225: Surface Ship Torpedo Defense (SSTD)

Schedule Details

| | Sta | Start | | |
|---|---------|-------|---------|------|
| Event | Quarter | Year | Quarter | Year |
| MILESTONE B | 3 | 2010 | 3 | 2010 |
| -SYSTEM DEMO TRIAL | 4 | 2011 | 4 | 2011 |
| MILESTONE C | 2 | 2012 | 2 | 2012 |
| DT/OT TESTS | 1 | 2013 | 4 | 2013 |
| OT&E | 2 | 2014 | 2 | 2015 |
| FRP | 3 | 2015 | 3 | 2015 |
| IOC | 4 | 2015 | 4 | 2015 |
| CAPABILITIES DEVELOPMENT DOCUMENT (CDD) | 2 | 2010 | 2 | 2010 |
| CDR | 2 | 2010 | 2 | 2010 |
| EDM-2 DESIGN | 1 | 2009 | 2 | 2010 |
| IN-WATER TRIALS (CT) | 4 | 2011 | 2 | 2013 |
| EDM-2 BUILD | 2 | 2010 | 1 | 2012 |
| DDG DEMO | 3 | 2009 | 3 | 2009 |
| ATTDS SPEC | 2 | 2010 | 2 | 2010 |
| EDM DESIGN | 1 | 2009 | 2 | 2010 |
| EDM BUILD | 3 | 2009 | 4 | 2011 |
| SYSTEM LEVEL TESTS (ST) | 1 | 2012 | 1 | 2014 |

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

PROJECT APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE**

1319: Research, Development, Test & Evaluation, Navy PE 0603506N: Surface Ship Torpedo Defense 9999: Congressional Adds

| BA 4: Advanced Component Develo | opment & Pro | ototypes (AC | :D&P) | | | | | | | | |
|---------------------------------|-------------------|---------------------|-----------------------------|----------------------------|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| COST (\$ in Millions) | FY 2009 Actual | FY 2010 Estimate | FY 2011 Base Estimate | FY 2011 OCO Estimate | FY 2011 Total Estimate | FY 2012 Estimate | FY 2013 Estimate | FY 2014 Estimate | FY 2015 Estimate | Cost To Complete | Total Cost |
| 9999: Congressional Adds | 2.553 | 9.958 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 45.729 |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

A. Mission Description and Budget Item Justification

Congressional Adds

B. Accomplishments/Planned Program (\$ in Millions)

| | FY 2009 | FY 2010 |
|--|---------|---------|
| | 0.000 | 6.373 |
| Congressional Add: AN/SLQ-25D Integration | | |
| FY 2010 Plans: Provide integration of the SLQ-25D countermeasure system with the Anti-Torpedo Torpedo Defense System. This integration includes development of interfaces with Ship's Sonar and Fire Control systems, as well as integration with new towed sensors and integration with the ship itself. | | |
| Congressional Add: Continuous Active Sonar for Torpedo DCL Systems | 0.000 | 3.585 |
| FY 2010 Plans: Adapt Continuous Active Sonar (CAS) and other active and passive sonar technologies that have proved very effective for active ASW applications, to improve Torpedo Detection, Classification, and Localization capabilities and extend ATTDS coverage against most stressing emergent threats. | | |
| Congressional Add: Supportability Training Services Infrastructure | 1.596 | 0.000 |

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603506N: Surface Ship Torpedo Defense

9999: Congressional Adds

B. Accomplishments/Planned Program (\$ in Millions)

| | FY 2009 | FY 2010 |
|---|---------|---------|
| FY 2009 Accomplishments: Develop the Open Architecture (OA) supportability processes, methods and tools required to facilitate the real-time capture and cataloging of sailor training, performance and vocational skills data. | | |
| Congressional Add: Mobile Acoustic Decoys for Surface Ship Defense | 0.957 | 0.000 |
| FY 2009 Accomplishments: Expand technology development of mobile countermeasures used for Surface Ship Torpedo Defense including device engineering, fabrication and testing capabilities to assess the effectiveness of Net Generation (mobile) Countermeasures. | | |
| Congressional Adds Subtotals | 2.553 | 9.958 |

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Congressional Adds