

CLASSIFICATION:

UNCLASSIFIED

| EXHIBIT R-2, RDT&E Budget Item Justification | | | | | | | DATE: | |
|---|---------|---------|---------|---------|--|---------|---------------|---------|
| | | | | | | | February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY | | | | | R-1 ITEM NOMENCLATURE | | | |
| RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7 | | | | | 0204571N Consolidated Training Systems Development | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Total PE Cost | 26.048 | 26.439 | 21.719 | 20.184 | 20.608 | 15.211 | 16.384 | 18.581 |
| 21427/22449 | | | | | | | | |
| Surface Tactical Team Trainer (STTT) | 5.305 | 8.414 | 14.676 | 8.374 | 5.950 | 5.749 | 5.948 | 6.187 |
| 22449 | | | | | | | | |
| Shipboard Electronic Attack Trainer (SEAT) | 0.967 | | | | | | | |
| 29106 | | | | | | | | |
| Tactical Communications On-Board Trainer | 0.967 | | | | | | | |
| 29107 | | | | | | | | |
| Link On-Board Trainer | 0.977 | | | | | | | |
| S3087 | | | | | | | | |
| NSS Training System | | | 0.293 | 0.392 | 0.294 | | | |
| W0604/ Training Range and Instrumentation Development Systems (TRIDS) | 3.370 | 3.065 | 2.241 | 2.057 | 2.144 | 2.635 | 2.681 | 2.728 |
| W3093 | | | | | | | | |
| Tactical Combat Training System (TCTS) | | | 2.851 | 7.862 | 10.688 | 4.983 | 5.878 | 7.754 |
| W2124 | | | | | | | | |
| Air Warfare Training Development (AWTD) | 1.942 | 2.065 | 1.658 | 1.499 | 1.532 | 1.844 | 1.877 | 1.912 |
| X1823 | | | | | | | | |
| Training & Modeling Systems (TMS) | 12.520 | 10.552 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| E9271 | | | | | | | | |
| Integrated Training for TACAIR Fleet* | | 2.343 | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: | | | | | | | | |
| *E9271 is a Congressional Add for Integrated Training for TACAIR Fleet. No other details are currently available. | | | | | | | | |
| The STTT will develop the Battle Force Tactical Training (BFTT) System to provide realistic Combat System level team training including a means to link surface ships together for coordinated Unit and Battle Group level training using Distributed Interactive Simulation (DIS) and High Level Architecture (HLA) protocols. The migration of selected modules of the BFTT software to Windows NT from UNIX OS is underway. BFTT developed the BFTT Electronic Warfare Trainer (BEWT) and applicable BFTT System software to provide EW operator and team training for Fleet EW Systems. The Congressional adds initiate the development of the Electronic Attack training capability for BEWT and develops the Tactical Communication system software interfaces and the BFTT Link Stimulation control software. The Navigation Seamanship and Shiphandling (NSS) Training System effort develops integrated COTS based navigation and shiphandling trainers to support navigation team training in Fleet Concentration Areas, as well as developing and integrating shipboard virtual reality shiphandling trainers for use onboard surface ships. | | | | | | | | |
| The Training Range and Instrumentation Development Systems (TRIDS) program provides development of many range systems including range electronic warfare simulator, advanced weapons training systems, laser training systems, Tactical Aircrew Combat Training System (TACTS), Large Area Tracking Range (LATR), combat training system improvements and shallow water range technology. | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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The STTT will develop the Battle Force Tactical Training (BFTT) System to provide realistic Combat System level team training including a means to link surface ships together for coordinated Unit and Battle Group level training using Distributed Interactive Simulation (DIS) and High Level Architecture (HLA) protocols. The migration of selected modules of the BFTT software to Windows NT from UNIX OS is underway. BFTT developed the BFTT Electronic Warfare Trainer (BEWT) and applicable BFTT System software to provide EW operator and team training for Fleet EW Systems. The Congressional adds initiate the development of the Electronic Attack training capability for BEWT and develops the Tactical Communication system software interfaces and the BFTT Link Stimulation control software. The Navigation Seamanship and Shiphandling (NSS) Training System effort develops integrated COTS based navigation and shiphandling trainers to support navigation team training in Fleet Concentration Areas, as well as developing and integrating shipboard virtual reality shiphandling trainers for use onboard surface ships.

The Training Range and Instrumentation Development Systems (TRIDS) program provides development of many range systems including range electronic warfare simulator, advanced weapons training systems, laser training systems, Tactical Aircrew Combat Training System (TACTS), Large Area Tracking Range (LATR), combat training system improvements and shallow water range technology.

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 47)

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|---|---|-------------------------------|
| EXHIBIT R-2, RDT&E Budget Item Justification | | DATE: February 2003 |
| APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY /BA-7 | R-1 ITEM NOMENCLATURE 0204571N Consolidated Training Systems Development | |
| <p>The AWTD program provides development of many aviation training systems including mission rehearsal simulation technologies, and the Aviation Training Technology Integration Facility (ATTIF).</p> <p>The TMS encompasses the requirements analysis and software development associated with the Navy's Maritime Development Agent function as part of the Joint Simulation System (JSIMS). The BFTT will develop the BFTT Electronic Warfare Trainer (BEWT) and applicable BFTT system software to provide EW operator and team training for Fleet EW Systems.</p> <p>The Tactical Combat Training System (TCTS) will provide the Navy a replacement for the Tactical Aircrew Combat Training System (TACTS) and Large Area Tracking Range (LATR) system. TCTS will also provide fleet deployable instrumentation for at sea training and tactics development. By providing a rangeless capability, the system will greatly increase the area where live instrumented training can be conducted. Initial fielding of a Non-Developmental Item (NDI) Pod system is planned at NAS Key West. The program incorporates an evolutionary (spiral) development towards a system capable of supporting a broad spectrum of naval platforms through weapons simulations, participant weapons system stimulation, open architecture and a high capacity/long range secure datalink.</p> | | |

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 2 of 47)

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|---|---|---------|-------------------------|------------------------|---|---------|-------------------------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | | | | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S3087) | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | [*] 8.216 | 8.414 | ^{**} 14.969 | ^{**} 8.766 | ^{**} 6.244 | 5.749 | 5.948 | 6.187 |
| RDT&E Articles Qty | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

*Includes Congressional Plus up funding for: 22449 SEAT; 29106 Tactical Comms OBT; and 29107 Link OBT.

**Includes Re-Engineering Funds Alignment S3087.

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Battle Force Tactical Training (BFTT) Program provides realistic joint warfare training across the spectrum of armed conflict; realistic unit level team training in all warfare areas; a means to link ships together which are in different homeports for coordinated training; external stimulation of shipboard training systems; and simulation of non-shipboard forces. BFTT uses a distributed architecture, integrating existing training systems, and uses Distributed Interactive Simulation (DIS) protocols, migrating to High Level Architecture (HLA). BFTT provides ships' Commanding Officers and Battle Group/Battle Force Commanders with the ability to conduct coordinated realistic, high stress, combat system level team training as an integral part of the Afloat Training Organization. BFTT provides a baseline capability/system that meets the Operational Requirements Document (ORD). Stimulators/Simulators (STIM/SIM) provides standardized Radio Frequency (RF), Intermediate Frequency (IF), and/or Digital injection into surface ship radars and fire control systems for training of shipboard operators/teams as part of the BFTT System. The BFTT Electronic Warfare Trainer (BEWT) effort provides embedded operator and team electronic emissions recognition training capability, integrated into BFTT. BFTT software modules are being migrated from UNIX/TAC to a Windows-NT/PC Operating System (OS). The Shipboard Electronic Attack Training (SEAT) effort initiates development of the active electronic countermeasures training capability to BEWT and to the BFTT software. The Tactical Communications On-Board Trainer effort modifies the tactical Link communications software to accept training data inputs. The Link On-Board Trainer effort modifies the BFTT operating software to provide control of the Link 4/11/16 Stimulator. NSS Training System effort develops integrated COTS based navigation and shiphandling trainers to support navigation team training in Fleet Concentration Areas, as well as developing and integrating shipboard virtual reality shiphandling trainers for use onboard surface ships.

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|--|---|---|-------------------------------|-------|--|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|-----|-----|-----|-----|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;"></th> <th style="width: 15%;">FY 02</th> <th style="width: 15%;">FY 03</th> <th style="width: 15%;">FY 04</th> <th style="width: 15%;">FY 05</th> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">3.579</td> <td style="text-align: center;">8.362</td> <td style="text-align: center;">9.196</td> <td style="text-align: center;">5.714</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </table> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 3.579 | 8.362 | 9.196 | 5.714 | RDT&E Articles Quantity | N/A | N/A | N/A | N/A |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 3.579 | 8.362 | 9.196 | 5.714 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; padding: 10px; min-height: 150px;"> <p>Continue to develop BFTT Link simulation software; develop/integrate new s/w capabilities and system interfaces; develop BG level Display and Debrief software; NTMF integration; BFTT Shore s/w development; Training I/F development for CG47-58 (AEGIS B/L 1 & 2); shock test; debrief s/w development and Fleet Battle Experiments; develop BFTT AIC training for AEGIS; Develop BFTT/TSSS Training on FFG CORTS; CMTpc Integration; Database Architecture & Content Improvements; Common Operating Procedure (COP) for Over The Horizon (OTH) Maritime Data; Common Operating Picture for LAWEX; Fleet Generated Requirements for B/L 2.0/2.1 and Improvements to B/L 2.2 and 2/3; Objective Based Training (Integrated Phase I/II); Readiness Measurement; JSAF Integration into BFTT (1st phase): BFTT-to-Sea (multi-ship demo); database Architecture & Content Improvements; JSAF Modifications for EW (2nd Phase); Database Improvements; AEGIS B/L 7 phase 1C; SQQ-89 Weapons Control; Scenario/Data Management via SIPRNET; Remote Reset of OBTs from BOPC; Improved Data Collection; Integrate Shore Based Aviation Trainers (E-2C, SH-60B, and P3-C). Embedded TBMD Training and JSIMS Integration/engineering will be developed after FY05. All shore based combat system team trainer funding was curtailed in FY94, therefore, BFTT is the Fleets only combat system level team training capability.</p> </div> | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;"></th> <th style="width: 15%;">FY 02</th> <th style="width: 15%;">FY 03</th> <th style="width: 15%;">FY 04</th> <th style="width: 15%;">FY 05</th> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.052</td> <td style="text-align: center;">0.052</td> <td style="text-align: center;">1.680</td> <td style="text-align: center;">1.660</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </table> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.052 | 0.052 | 1.680 | 1.660 | RDT&E Articles Quantity | N/A | N/A | N/A | N/A |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.052 | 0.052 | 1.680 | 1.660 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; padding: 10px; min-height: 100px;"> <p>Funding is provided for the software development for the Multi-Mission Team Trainer (MMTT) Phase 2. The MMTT Phase I replaced the Device S14A13 Tactical Advanced Simulated Warfare Integrated Trainer (TASWIT), which modernized the outdated software and minimizes the life cycle support costs. Phase 2 replaces the Device 20F15 Tactical Advanced Combat Direction and Electronic Warfare (TACDEW) System, which drastically reduces the life cycle support of the Fleet's combat system level and battle group level team training capability.</p> </div> | | | | | | | | | | | | | | | | | | | |

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Exhibit R-2a, RDTEN Project Justification
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|---|---|---|-------|-------|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|-----|-----|-----|-----|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program (Cont.) | | | | | | | | | | | | | | | | | | |
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| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 1.674 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; padding: 10px; min-height: 60px;"><p>The BFTT High Level Architecture (BFTT HLA) conversion from Distributed Integrated Simulation (DIS) protocols were in FY 02. It was mandated by DOD that the BFTT System be HLA compliant by the end of FY 2002. This compliance enables BFTT Systems to interface and interoperate with all training systems Service-wide.</p></div> | | | | | | | | | | | | | | | | | | |
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| Accomplishments/Effort/Subtotal Cost | 0.967 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | |
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| <div style="border: 1px solid black; padding: 10px; min-height: 100px;"><p>Congress appropriated and authorized funding for the initial development of the Shipboard Electronic Attack Trainer (SEAT) capability as part of the BFTT System and BFTT Electronic Warfare Trainer (BEWT). This funding is developing an electronic attack training capability for tactical training by shipboard electronic warfare operators and teams as part of the BFTT Program. There currently is no active EW organic/shipboard proficiency training capability for the AN/SLQ-32A Electronic Warfare System, all training is done at shore-based schools. This effort will provide a cost-effective approach to standardizing active, electronic attack training for operators and teams across the Navy.</p></div> | | | | | | | | | | | | | | | | | | |

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Exhibit R-2a, RDTEN Project Justification
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| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 1.944 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 1.000 | 1.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program (Cont.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"><tr><td style="width: 30%;"></td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td>0.000</td><td>0.000</td><td>2.800</td><td>0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td></tr></table> <div style="border: 1px solid black; padding: 10px; min-height: 100px; margin-bottom: 10px;">This funding supports the R&D efforts associated with the OPN procurement of BFTT for 12 FFG's. The efforts that will be accomplished are software engineering, FFG Combat Direction System Data Extraction (CDS DX) Software development, hardware NRE, software design, engineering, integration and testing, as well as systems engineering.</div> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"><tr><td style="width: 30%;"></td><td style="width: 15%;">FY 02</td><td style="width: 15%;">FY 03</td><td style="width: 15%;">FY 04</td><td style="width: 15%;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td>0.000</td><td>0.000</td><td>0.293</td><td>0.392</td></tr><tr><td>RDT&E Articles Quantity</td><td>N/A</td><td>N/A</td><td>N/A</td><td>NA</td></tr></table> <div style="border: 1px solid black; padding: 10px; min-height: 100px;">NSS Training System effort develops integrated COTS based navigation and shiphandling trainers to support navigation team training in Fleet Concentration Areas, as well as developing and integrating shipboard virtual reality shiphandling trainers for use onboard surface ships.</div> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 2.800 | 0.000 | RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 0.293 | 0.392 | RDT&E Articles Quantity | N/A | N/A | N/A | NA |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 2.800 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 0.293 | 0.392 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | N/A | N/A | N/A | NA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No.

176

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 7 of 47)

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CLASSIFICATION:

| | | | | |
|---|---|---|-------------------------------|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | |

C. PROGRAM CHANGE SUMMARY:

| | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|--|---------|---------|---------|---------|
| Funding: | | | | |
| Previous President's Budget: (FY 03 Pres Controls) | 8.568 | 15.340 | 20.841 | 18.822 |
| Current BES/President's Budget: | 8.216 | 8.414 | 14.969 | 8.766 |
| Total Adjustments | -0.352 | -6.926 | -5.872 | -10.056 |
| Summary of Adjustments | | | | |
| Congressional program reductions | 0.000 | | | |
| Congressional undistributed reductions | 0.000 | | | |
| Congressional rescissions | 0.000 | | | |
| SBIR/STTR Transfer | -0.119 | | | |
| Economic Assumptions | -0.024 | -0.086 | | |
| Reprogrammings | -0.110 | -6.680 | -9.068 | -10.953 |
| Program Add | 0.000 | 0.000 | 4.100 | 1.400 |
| Misc. Reductions/Additions | -0.099 | -0.160 | -0.904 | -0.503 |
| Congressional increases | 0.000 | 0.000 | 0.000 | 0.000 |
| Subtotal | -0.352 | -6.926 | -5.872 | -10.056 |

Schedule:

Not Applicable.

Technical:

Not Applicable.

R-1 SHOPPING LIST - Item No. 176

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| | | | | | | | |
|---|--|---|--|---|--|-------------------------------|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | | |

D. OTHER PROGRAM FUNDING SUMMARY:

| Line Item No. & Name | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | To Complete | Total Cost |
|---|---------|---------|---------|---------|---------|---------|---------|---------|----------------|---------------|
| OPN 276200 (Surface BFTT portion only) | 40.081 | 15.922 | 42.71 | 39.017 | 23.294 | 14.261 | 0 | 0 | 0 | 350.589 |

E. ACQUISITION STRATEGY:

The BFTT acquisition strategy for system development utilizes the spiral development model, as mandated by OSD. Incremental acquisition and fielding, utilizing commercial off-the-shelf technology to the extent possible, is in accordance with the BFTT ACAT IVM Milestone III approved documentation.

F. MAJOR PERFORMERS:

PHD NSWC, Port Hueneme, CA - BFTT System Engineering, Integration, and Testing.
CDSA Dam Neck, Dam Neck, VA - BFTT Software Development Activity.

R-1 SHOPPING LIST - Item No. 176

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|--|------------------------|-------------------------------------|---|------------|------------------|---|------------------|------------------------|------------------|------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | PROGRAM ELEMENT 0204571N Consolidated Training Systems Development | | | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | | | | | |
| 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 |
| Primary Hardware Development | * | AAI/MD & EWA/WV/ Govworks | 11.498 | | | | | | | 0.000 | 11.498 | 11.498 |
| Ancillary Hardware Development | WR | PHD NSW/Crane/ Govworks | 0.999 | | | | | | | 0.000 | 0.999 | 0.999 |
| Component Development | | | | | | | | | | | 0.000 | |
| Ship Integration | | | | | | | | | | | 0.000 | |
| Ship Suitability | | | | | | | | | | | 0.000 | |
| Systems Engineering | ** | CDSA/NSWC Crane/ Govworks | 19.551 | 1.244 | 01/03 | 2.736 | 01/04 | 1.135 | 01/05 | Continuing | Continuing | N/A |
| Training Development | | | | | | 0.000 | | 0.000 | | | 0.000 | |
| Licenses | WR/RCP | PHD NSW/CDSA/Crane/ Govworks | 2.169 | 0.173 | 01/03 | 1.321 | 01/04 | 0.142 | 01/05 | Continuing | Continuing | N/A |
| Tooling | | | | | | | | | | | 0.000 | |
| GFE | | | 2.497 | | | | | | | 0.000 | 2.497 | 2.497 |
| Award Fees | | | 0.357 | | | | | | | 0.000 | 0.357 | 0.357 |
| Subtotal Product Development | | | 37.070 | 1.417 | | 4.057 | | 1.277 | | Continuing | Continuing | |
| Remarks: * AAI Contract Award 3/98 CPIF; EWA Contract Award 6/98 CPFF ** WR/RCP/MIPR/IPR | | | | | | | | | | | | |
| Development Support | | | | | | | | | | | 0.000 | |
| Software Development | * | PHD/NAWCTSD/GSA/SPAWA R/Govworks | 37.121 | 4.878 | 01/03 | 7.326 | 01/04 | 5.596 | 01/05 | Continuing | Continuing | N/A |
| Training Development | | | | | | | | | | | 0.000 | |
| Integrated Logistics Support | | | | | | | | | | | 0.000 | |
| Configuration Management | | | | | | | | | | | 0.000 | |
| Technical Data | * | PHD NSW/NAWC TSD/GSA/Crane/Govworks | 8.807 | 0.850 | 01/03 | 1.415 | 01/04 | 0.946 | 01/05 | Continuing | Continuing | N/A |
| GFE | | | | | | | | | | | 0.000 | |
| Award Fees | | | | | | | | | | | 0.000 | |
| Subtotal Support | | | 45.928 | 5.729 | | 8.741 | | 6.542 | | 0.000 | 66.940 | |
| Remarks: *WR/RCP/MIPR/IPR | | | | | | | | | | | | |

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|--|------------------------|-----------------------------------|---|------------|------------------|------------|---|------------|------------------|-------------------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | | | DATE: February 2003 | | |
| APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-7 | | | PROGRAM ELEMENT 0204571N Consolidated Training Systems Development | | | | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S0387) | | | | | |
| 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 |
| Developmental Test & Evaluation | * | Crane/PHD/NAWC/CDSA/Govworks | 3.702 | 0.540 | 01/03 | 1.227 | 01/04 | 0.426 | 01/05 | Continuing | Continuing | N/A |
| 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 | | | 3.702 | 0.540 | | 1.227 | | 0.426 | | Continuing | Continuing | N/A |
| Remarks: *WR/RCP/MIPR/IPR | | | | | | | | | | | | |
| Contractor Engineering Support | | | | | | | | | | | 0.000 | |
| Government Engineering Support | * | PHD NSWC/GSA/CDSA/Crane/ Govworks | 2.679 | 0.729 | 01/03 | 0.944 | 01/04 | 0.520 | 01/05 | Continuing | Continuing | N/A |
| Program Management Support | | | | | | | | | | | 0.000 | |
| Travel | | | | | | | | | | | 0.000 | |
| Labor (Research Personnel) | | | | | | | | | | | 0.000 | |
| SBIR Assessment | | | | | | | | | | | 0.000 | |
| Subtotal Management | | | 2.679 | 0.729 | | 0.944 | | 0.520 | | Continuing | Continuing | N/A |
| Remarks: *WR/RCP/MIPR/IPR | | | | | | | | | | | | |
| Total Cost | | | 89.379 | 8.414 | | 14.969 | | 8.766 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 11 of 47)

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| EXHIBIT R4, Schedule Profile | | | | | | | | | | | | | | | | | | | | | | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | | | | | | | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | | | | | | | | | | | | PROJECT NUMBER AND NAME 21427 Surface Tactical Team Trainer (STTT) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fiscal Year | 2002 | | | | 2003 | | | | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 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 (Post M/S III) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

* Not required for Budget Activities 1, 2, 3, and 6

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CLASSIFICATION:

[illegible]

R-1 SHOPPING LIST - Item No. 176

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 13 of 47)

UNCLASSIFIED

CLASSIFICATION:

| | | | | | | | | |
|---|---|---------|---------|---------|--|---------|---------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: | |
| | | | | | | | February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | | | | PROJECT NUMBER AND NAME W0604 Training Range and Instrumentation Development (TRID) | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 3.370 | 3.065 | 2.241 | 2.057 | 2.144 | 2.635 | 2.681 | 2.728 |
| RDT&E Articles Qty | | | | | | | | |
| <p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project develops specialized instrumentation systems for fleet readiness training while minimizing life cycle costs. Tasks include development of the following: electronic warfare simulators and associated subsystems, target control systems, Tactical Aircrew Combat Training System (TACTS), Large Area Tracking Range (LATR) improvements, combat training systems improvements, underwater technology, ranges interoperability and information architecture, shallow water range activity which included establishment of capability at Pacific Missile Range Facility Shallow Water Training Range (PMRF SWTR) and assorted Advanced Weapons Training Systems (AWTS), such as Imaging Weapons Training System (IWTS), Remote Strafe Scoring System (RSSS), and weapon and countermeasure simulations for use with various range training systems.</p> | | | | | | | | |

R-1 SHOPPING LIST - Item No.

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 14 of 47)

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CLASSIFICATION:

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|---|---|--|-------------------------------|-------|
| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME W0604 Training Range and Instrumentation Development (TRID) | | |
| (U) B. Accomplishments/Planned Program | | | | |
| Large Area Tracking Range (LATR) | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 0.944 | 1.444 | 1.071 | 0.600 |
| RDT&E Articles Quantity | | | | |
| <div style="border: 1px solid black; padding: 5px;"> <p>Developed Block 4.0 software upgrade, analyzed range integration requirements, and developed hardware upgrades. Redesigned, integrated and tested modules to eliminate obsolete components on the LATR power conditioner. Complete operational test and evaluation and integration of Block 4.0 software upgrade. Complete design, integration, and test of participant instrumentation packages (PIP) modules to address obsolescence, high failure components and to improve operability and performance. Conduct and complete vulnerability testing of the Ground System Rehost. Conduct and complete security testing and assessment for LATR system certification and accreditation for Ground System Rehost. Initiate and complete development, test and integration of software and hardware modifications to system test sets.</p> </div> | | | | |
| Combat Training Systems Development | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 2.426 | 1.621 | 1.170 | 1.457 |
| RDT&E Articles Quantity | | | | |
| <div style="border: 1px solid black; padding: 5px;"> <p>Developed additional training capabilities for the Control and Computational Subsystem (CCS), Personal Computer Advanced Display and Debriefing Subsystem (PCADDS), and developed a formalized interface between the CCS and Large Area Tracking Range (LATR). Complete CCS Block 6.0 upgrade. Complete Test Set Upgrade and system rehost. Complete formalization of CCS/LATR integration. Initiate investigation and development of the Common Advanced Display to interface with various Tactical Training Ranges systems.</p> </div> | | | | |

R-1 SHOPPING LIST - Item No.

176

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 15 of 47)

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CLASSIFICATION:

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| EXHIBIT R-2a, RDT&E Project Justification | | DATE: February 2003 |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME W0604 Training Range and Instrumentation Development (TRID) |

(U) C. PROGRAM CHANGE SUMMARY:

| | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|--|---------|---------|---------|---------|
| (U) Funding: | | | | |
| Previous President's Budget: | 3.570 | 3.141 | 2.936 | 2.524 |
| Current BES/President's Budget | 3.370 | 3.065 | 2.241 | 2.057 |
| Total Adjustments | -0.200 | -0.076 | -0.695 | -0.467 |
| Summary of Adjustments | | | | |
| Congressional program reductions | | | | |
| Congressional undistributed reductions | | -0.019 | | |
| Congressional rescissions | -0.008 | | | |
| SBIR/STTR Transfer | -0.053 | | | |
| Economic Assumptions | -0.009 | -0.057 | -0.066 | -0.051 |
| Reprogrammings | -0.130 | | | |
| Other Navy/OSD Adjustments | | | -0.629 | -0.416 |
| Congressional increases | | | | |
| Subtotal | -0.200 | -0.076 | -0.695 | -0.467 |

(U) Schedule: The following milestones have been added, changed or deleted to better reflect program status:

ADDED:

- TACTS Upgrade Requests Development 2Q/05
- Common Advanced Display Market Survey 3Q/04
- Common Advanced Display Specifications Development 3Q/04
- Common Advanced Display Production Contract 4Q/05
- Test Set Upgrade/Rehost IOC 1Q04/4Q05
- Common Advanced Display IOC 4Q/06
- Block 5.0 LATR Upgrade IOC 4Q/03

CHANGED:

From:

- Block 4.0 LATR Upgrade 4Q/03
- LATR Multi GIS OT&E 3Q/02
- LATR GPS Receiver OT&E 2Q/03
- LATR AIDU OT&E 2Q/03

To:

- Block 4.0 LATR Upgrade 3Q/03
- LATR Multi GIS OT&E 4Q/02
- LATR GPS Receiver OT&E 2Q05
- LATR AIDU OT&E 2Q/05

(U) Technical: N/A

R-1 SHOPPING LIST - Item No. 176

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| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | | | PROJECT NUMBER AND NAME W0604 Training Range and Instrumentation Development (TRID) | | | |

(U) D. OTHER PROGRAM FUNDING SUMMARY:

| Line Item No. & Name | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | To Complete | Total Cost |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|---------------|
| Related OPN: | 1.542 | 0.050 | 0 | 0 | 0 | 0 | 0 | 0 | Cont. | |
| Related RDT&E: Not Applicable | | | | | | | | | | |

(U) E. ACQUISITION STRATEGY: *

The Training Range and Instrumentation Development (TRID) program is a non-ACAT program. The integrated program teams that develop new TRID capabilities include contractors whose products and services are obtained by means of competitive awards, Indefinite Deliveries/Indefinite Quantity (IDIQ), and cost-type contracts. Individual delivery orders are awarded for specific development efforts.

R-1 SHOPPING LIST - Item No. 176

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| CLASSIFICATION: | | | | | | | | | | | | |
| Exhibit R-3 Cost Analysis (page 1) | | | | | | | DATE: February 2003 | | | | | |
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT PROJECT NUMBER AND NAME | | | | | | | | | |
| RDT&E, N / BA-7 | | | 0204571N Consolidated Training Range and Instrumentation Development (TRID) | | | | | | | | | |
| 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 |
| Systems Engineering and Software Development (Misc. < \$1M) | Various | Various | 81.066 | | | | | | | 0.000 | 81.066 | |
| Primary Hdw Dev. Electronics | Various | Various | 0.450 | 0.612 | 1Q/03 | 0.268 | 1Q/04 | 0.078 | 1Q/05 | Continuing | Continuing | |
| Aircraft Integration | Various | Various | 0.107 | 0.085 | 1Q/03 | 0.072 | 1Q/04 | 0.036 | 1Q/05 | Continuing | Continuing | |
| Systems Engineering | Various | Various | 0.170 | 0.096 | 1Q/03 | 0.084 | 1Q/04 | 0.098 | 1Q/05 | Continuing | Continuing | |
| Licenses | Various | Various | 0.004 | 0.004 | 1Q/03 | | | | | Continuing | Continuing | |
| Subtotal Product Development | | | 81.797 | 0.797 | | 0.424 | | 0.212 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Development Support (Misc. <\$1M) | Various | Various | 6.759 | 0.338 | 1Q/03 | 0.200 | 1Q/04 | 0.289 | 1Q/05 | Continuing | Continuing | |
| Software Dev. Electronics | Various | Various | 1.044 | 0.657 | 1Q/03 | 0.442 | 1Q/04 | 0.575 | 1Q/05 | Continuing | Continuing | |
| Integrated Logistics Support | Various | Various | 0.070 | 0.070 | 1Q/03 | 0.067 | 1Q/04 | 0.070 | 1Q/05 | Continuing | Continuing | |
| Configuration Management | Various | Various | 0.080 | 0.085 | 1Q/03 | 0.054 | 1Q/04 | 0.080 | 1Q/05 | Continuing | Continuing | |
| Technical Data | Various | Various | 0.010 | | 1Q/03 | 0.075 | 1Q/04 | | | Continuing | Continuing | |
| Studies & Analysis | Various | Various | | 0.359 | 1Q/03 | 0.100 | 1Q/04 | 0.150 | 1Q/05 | Continuing | Continuing | |
| Subtotal Support | | | 7.963 | 1.509 | | 0.938 | | 1.164 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

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Exhibit R-3, Project Cost Justification
(Exhibit R-3, Page 18 of 47)

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CLASSIFICATION:

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| Exhibit R-3 Cost Analysis (page 2) | | | | | | | DATE: February 2003 | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | PROGRAM ELEMENT 0204571N Consolidated Trai | | PROJECT NUMBER AND NAME W0604 Training Range and Instrumentation Development (TRID) | | | | | | | |
| 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 |
| Developmental Test & Evaluation (Misc. <\$1M) | Various | Various | 3.918 | 0.187 | 1Q/03 | 0.192 | 1Q/04 | 0.160 | 1Q/05 | Continuing | Continuing | |
| Operational Test & Evaluation | Various | Various | 0.212 | 0.168 | 1Q/03 | 0.314 | 1Q/04 | 0.239 | 1Q/05 | Continuing | Continuing | |
| Test Assets | Various | Various | 0.022 | 0.076 | 1Q/03 | 0.056 | 1Q/04 | 0.006 | 1Q/05 | Continuing | Continuing | |
| Subtotal T&E | | | 4.152 | 0.431 | | 0.562 | | 0.405 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Contractor Engineering Support | Various | Various | 0.125 | 0.100 | 1Q/03 | 0.077 | 1Q/04 | 0.076 | 1Q/05 | Continuing | Continuing | |
| Government Eningeering Support | Various | Various | 0.265 | 0.115 | 1Q/03 | 0.124 | 1Q/04 | 0.100 | 1Q/05 | Continuing | Continuing | |
| Program Mangement Support | Various | Various | 1.773 | 0.088 | 1Q/03 | 0.091 | 1Q/04 | 0.080 | 1Q/05 | Continuing | Continuing | |
| Travel | Various | Various | 0.020 | 0.025 | 1Q/03 | 0.025 | 1Q/04 | 0.020 | 1Q/05 | Continuing | Continuing | |
| SBIR Assessment | | | 0.053 | | | | | | | 0.000 | 0.053 | |
| Subtotal Management | | | 2.236 | 0.328 | | 0.317 | | 0.276 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 96.148 | 3.065 | | 2.241 | | 2.057 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, Page 19 of 47)

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CLASSIFICATION:

| EXHIBIT R4, Schedule Profile | | | | | | | | | | | | | | | | | | | | | | | | DATE: | | | | | | | | |
|------------------------------------|------|---|---|---|------|---|---|---|--|---|---|---|------|---|---|---|------|--------------------------------------|---|---|------|---|---|---------------|------|---|---|---|------|--|--|--|
| Combat Training System Development | | | | | | | | | | | | | | | | | | | | | | | | February 2003 | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY | | | | | | | | | PROGRAM ELEMENT NUMBER AND NAME | | | | | | | | | PROJECT NUMBER AND NAME | | | | | | | | | | | | | | |
| RDT&E, N / BA-7 | | | | | | | | | 0204571N Consolidated Training Systems Development | | | | | | | | | W0604 (TRID) Common Advanced Display | | | | | | | | | | | | | | |
| Fiscal Year | 2002 | | | | 2003 | | | | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | |
| | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Block Upgrade 5.3 IOC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PCADDS (JDS) IOC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Block Upgrade 6.0 IOC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LATR/TACTS Interface | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Common Advanced Display | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Market Survey | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spec Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IOC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test Set Rehost Dev | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deliveries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

* Not required for Budget Activities 1, 2, 3, and 6

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 20 of 47)

UNCLASSIFIED

CLASSIFICATION:

[illegible]

R-1 SHOPPING LIST - Item No. 176

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 21 of 47)

UNCLASSIFIED

CLASSIFICATION:

| EXHIBIT R4, Schedule Profile | | | | | | | | | | | | | | | | | | | | | | | DATE: | | | | | | | | | |
|----------------------------------|------|---|---|---|------|---|---|---|--|---|---|---|------|---|---|---|------|--------------------------------------|---|---|------|---|---------------|---|------|---|---|---|------|--|--|--|
| Large Area Tracking Range (LATR) | | | | | | | | | | | | | | | | | | | | | | | February 2003 | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY | | | | | | | | | PROGRAM ELEMENT NUMBER AND NAME | | | | | | | | | PROJECT NUMBER AND NAME | | | | | | | | | | | | | | |
| RDT&E, N / BA-7 | | | | | | | | | 0204571N Consolidated Training Systems Development | | | | | | | | | W0604 (TRID) Common Advanced Display | | | | | | | | | | | | | | |
| Fiscal Year | 2002 | | | | 2003 | | | | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | |
| | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Block 4.0 LATR Upgrade | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Block 4.0 LATR Upgrade DT-III | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LATR Power Conditioner OT&E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LATR Multi-GIS OT&E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LATR GPS REC OT&E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LATR ADIU OT&E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LATR Recertification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Block 5.0 LATR Upgrade | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deliveries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

* Not required for Budget Activities 1, 2, 3, and 6

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 22 of 47)

UNCLASSIFIED

CLASSIFICATION:

[illegible]

UNCLASSIFIED

CLASSIFICATION:

| | | | | | | | | |
|---|---|---------|---------|---------|---|---------|-------------------------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | | | | PROJECT NUMBER AND NAME W3093 Tactical Combat Training System (TCTS) | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | | | 2.851 | 7.862 | 10.688 | 4.983 | 5.878 | 7.754 |
| RDT&E Articles Qty | | | | | | | | |
| <p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Tactical Combat Training System will provide the Navy a replacement for major portions of the Tactical Aircrew Combat Training System (TACTS) and Large Area Tracking Range (LATR) system. TCTS will also provide fleet deployable training for at sea training and tactics development. By providing a rangeless capability, the system will greatly increase the area where live instrumented training can be conducted. Initial fielding of a Non-Developmental Item (NDI) Pod system is planned at NAS Key West. The program incorporates an evolutionary (spiral) development towards a system capable of supporting a broad spectrum of naval platforms through weapons simulations, participant weapons system stimulation, open architecture and a high capacity/long range secure data link.</p> | | | | | | | | |

R-1 SHOPPING LIST - Item No.

176

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 24 of 47)

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

| | | | | | | | | | | | | | | | | | | |
|---|---|---|-------|---------------------------------|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|--|--|--|---|
| EXHIBIT R-2a, RDT&E Project Justification | | DATE: February 2003 | | | | | | | | | | | | | | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME W3093 Tactical Combat Training System (TCTS) | | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | | |
| <table border="1"><tr><td>Tactical Combat Training System</td><td>FY 02</td><td>FY 03</td><td>FY 04</td><td>FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td>0.000</td><td>0.000</td><td>2.851</td><td>7.862</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td>4</td></tr></table> | | | | Tactical Combat Training System | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 2.851 | 7.862 | RDT&E Articles Quantity | | | | 4 |
| Tactical Combat Training System | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.000 | 0.000 | 2.851 | 7.862 | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | 4 | | | | | | | | | | | | | | |
| <p>Qualify and complete the NDI Rangeless Pod system for use at small range. Develop and deliver Integrated Logistics products for fielding the NDI pod at NAS Key West. Develop F/A-18 (C/D/E/F) Aircraft Instrumentation System (Internal) (AISI). Initiate testing of TCTS system for deployed airwing training. Initiate development of instrumentation package for rotary wing and transport aircraft. Develop and implement track exchange interface between TCTS live monitor and TACTS Control and Computation Subsystem (CCS). Define Test and Training Enabling Architecture (TENA) compliant interface between TCTS and an Advance Display System. Develop and deliver Integrated Logistics products for the AISI and for fielding the TCTS system aboard deployed carriers.</p> | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No.

176

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 25 of 47)

UNCLASSIFIED

CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|----------------------------|---------|--|---------|---------|---------|---------|----------|--|--|--|--|------------------------------|--|--|-------|-------|--------------------------------|--|--|-------|-------|-------------------|--|--|-------|-------|------------------------|--|--|--|--|----------------------------------|--|--|--|--|--|--|--|--|--|---------------------------|--|--|--|--|--------------------|--|--|--|--|----------------------|--|--|--------|--------|----------------|--|--|--|--|----------------------------|--|--|-------|-------|-------------------------|--|--|--|--|----------|--|--|-------|-------|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | PROJECT NUMBER AND NAME W3093 Tactical Combat Training System (TCTS) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 40%;"></th> <th style="text-align: right; width: 10%;">FY 2002</th> <th style="text-align: right; width: 10%;">FY 2003</th> <th style="text-align: right; width: 10%;">FY 2004</th> <th style="text-align: right; width: 10%;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Funding:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Previous President's Budget:</td> <td></td> <td></td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>Current BES/President's Budget</td> <td></td> <td></td> <td style="text-align: right;">2.851</td> <td style="text-align: right;">7.862</td> </tr> <tr> <td>Total Adjustments</td> <td></td> <td></td> <td style="text-align: right; border-top: 1px solid black;">2.851</td> <td style="text-align: right; border-top: 1px solid black;">7.862</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td> Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional undistributed reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Economic Assumptions</td> <td></td> <td></td> <td style="text-align: right;">-0.091</td> <td style="text-align: right;">-0.415</td> </tr> <tr> <td> Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Other Navy/OSD Adjustments</td> <td></td> <td></td> <td style="text-align: right;">2.942</td> <td style="text-align: right;">8.277</td> </tr> <tr> <td> Congressional increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Subtotal</td> <td></td> <td></td> <td style="text-align: right; border-top: 1px solid black;">2.851</td> <td style="text-align: right; border-top: 1px solid black;">7.862</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 20px;">Not Applicable</p> <p style="margin-top: 20px;">Technical:</p> <p style="margin-left: 20px;">Not Applicable</p> | | | | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Funding: | | | | | Previous President's Budget: | | | 0.000 | 0.000 | Current BES/President's Budget | | | 2.851 | 7.862 | Total Adjustments | | | 2.851 | 7.862 | Summary of Adjustments | | | | | Congressional program reductions | | | | | Congressional undistributed reductions | | | | | Congressional rescissions | | | | | SBIR/STTR Transfer | | | | | Economic Assumptions | | | -0.091 | -0.415 | Reprogrammings | | | | | Other Navy/OSD Adjustments | | | 2.942 | 8.277 | Congressional increases | | | | | Subtotal | | | 2.851 | 7.862 |
| | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funding: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Previous President's Budget: | | | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current BES/President's Budget | | | 2.851 | 7.862 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Adjustments | | | 2.851 | 7.862 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Summary of Adjustments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional program reductions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional undistributed reductions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional rescissions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SBIR/STTR Transfer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Economic Assumptions | | | -0.091 | -0.415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reprogrammings | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Navy/OSD Adjustments | | | 2.942 | 8.277 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional increases | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | | | 2.851 | 7.862 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

UNCLASSIFIED

Exhibit R-2a, RD TEN Project Justification
(Exhibit R-2a, page 26 of 47)

UNCLASSIFIED

CLASSIFICATION:

| | | | | | | | | | | |
|---|--|--|---|--|--|---|----------------------------|--|--|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development | | | PROJECT NUMBER AND NAME W3093 Tactical Combat Training System (TCTS) | | | | |

D. OTHER PROGRAM FUNDING SUMMARY:

| Line Item No. & Name | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | <u>To Complete</u> | <u>Total Cost</u> |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|-------------------|
| Related OPN: | 0 | 0 | 1.188 | 1.320 | 2.220 | 2.325 | 4.162 | 5.615 | Cont. | |
| Related APN: | 0 | 0 | 7.234 | 11.087 | 21.261 | 27.918 | 29.362 | 25.921 | Cont. | |

E. ACQUISITION STRATEGY: *

TCTS will employ an evolutionary acquisition strategy to procure a base Non-Developmental Item System and (incrementally) spirally develop the system to meet the full Ord requirements. TCTS will be a cooperative program with the USAF P5 CTS program. The USAF will award a 7 year contract in 2nd qtr FY03. This contract will include development options for the TCTS projects listed above.

F. MAJOR PERFORMERS: **

* Not required for Budget Activities 1,2,3, and 6
 ** Required for DON and OSD submit only.

R-1 SHOPPING LIST - Item No. 176

UNCLASSIFIED

UNCLASSIFIED

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|------------------------------------|------------------------|--------------------------------|-----------------------------|------------|--|------------|------------------|----------------------------|------------------|------------------|------------|--------------------------|
| CLASSIFICATION: | | | | | | | | | | | | |
| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | PROJECT NUMBER AND NAME | | | | | | | |
| RDT&E, N / BA-7 | | | 0204571N Consolidated Trail | | W3093 Tactical Combat Training System (TCTS) | | | | | | | |
| 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 |
| Primary Hdw Dev. Electronics | CPFF | TBD | | | | 1.783 | 1Q/04 | 2.475 | 1Q/05 | Continuing | Continuing | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Subtotal Product Development | | | | | | 1.783 | | 2.475 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Software Dev. Electronics | CPFF | TBD | | | | | | 1.637 | 1Q/05 | Continuing | Continuing | |
| Integrated Logistics Support | Various | Various | | | | 0.230 | 1Q/04 | 0.390 | 1Q/05 | Continuing | Continuing | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Subtotal Support | | | | | | 0.230 | | 2.027 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |

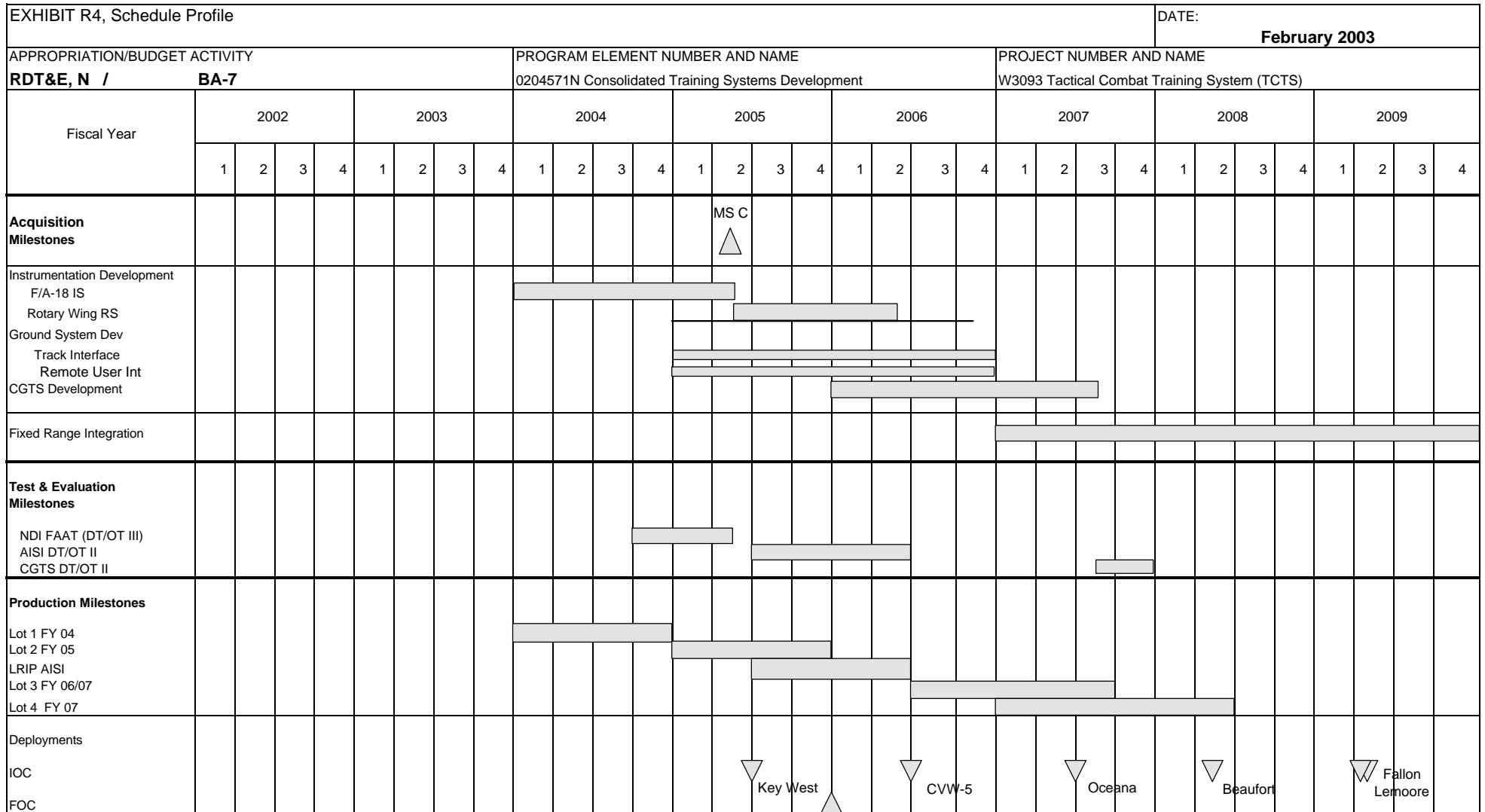
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|---|------------------------|--------------------------------|--|------------|------------------|------------|----------------------------|------------|------------------|------------------|------------|--------------------------|
| CLASSIFICATION: | | | | | | | | | | | | |
| Exhibit R-3 Cost Analysis (page 2) | | | | | | | DATE: February 2003 | | | | | |
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT PROJECT NUMBER AND NAME | | | | | | | | | |
| RDT&E, N / BA-7 | | | 0204571N Consolidated Trail W3093 Tactical Combat Training System (TCTS) | | | | | | | | | |
| 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 |
| Developmental Test & Evaluation (Misc. <\$1M) | WX | NAWC-AD PR | | | | 0.082 | 1Q/04 | 1.723 | 1Q/05 | Continuing | Continuing | |
| Test Assets | | | | | | | | | | Continuing | Continuing | |
| Subtotal T&E | | | | | | 0.082 | | 1.723 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Contractor Engineering Support | CPFF | TBD | | | | 0.042 | 1Q/4Q | | | | | |
| Government Engineering Support | N/A | NAWC-AD PR | | | | 0.399 | 1Q/04 | 0.775 | 1Q/05 | Continuing | Continuing | |
| Program Mangement Support | N/A | NAWC-AD PR | | | | 0.250 | 1Q/04 | 0.790 | 1Q/05 | Continuing | Continuing | |
| Travel | N/A | NAWC-AD PR | | | | 0.065 | 1Q/04 | 0.072 | 1Q/05 | Continuing | Continuing | |
| Subtotal Management | | | | | | 0.756 | | 1.637 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 0.000 | 0.000 | | 2.851 | | 7.862 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |

UNCLASSIFIED

CLASSIFICATION:



* Not required for Budget Activities 1, 2, 3, and 6

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 30 of 47)

UNCLASSIFIED

CLASSIFICATION:

| Exhibit R-4a, Schedule Detail | | | | | DATE: February 2003 | | | |
|--|--|---------|---------|---------|--|---------|---------|---------|
| APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT | | | | PROJECT NUMBER AND NAME | | | |
| RDT&BA-7 | 0204571N Consolidated Training Systems Development | | | | W3093 Tactical Combat Training System (TCTS) | | | |
| Schedule Profile | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| ORD Approval | 4Q | | | | | | | |
| NPR 1 | | | 1Q | | | | | |
| Navy Base Contract (Lot 1) | | | 1Q-4Q | | | | | |
| Development Phase II F-18 Internal Unit (AISI) | | | 1Q-4Q | 1Q-2Q | | | | |
| NDI FAAT (DT/OT) | | | 4Q | 1Q-2Q | | | | |
| Production Option 2 (Lot 2) | | | | 1Q-4Q | | | | |
| Milestone C (MS C) | | | | 2Q | | | | |
| IOC Key West | | | | 2Q-3Q | | | | |
| AISI DT/OT II | | | | 3Q-4Q | | | | |
| Development Phase II ATR (Rotary Wing) Unit | | | | 2Q-4Q | | | | |
| LRIP AISI | | | | 3Q-4Q | | | | |
| Development Phase III (CGTS Development) | | | | | | | | |
| NPR 2 | | | | | | | | |
| FOC Key West | | | | 4Q | | | | |
| Production Option 3 (Lot 3) | | | | | | | | |
| IOC CVW-5 | | | | | | | | |
| Development Phase IV (Fixed Range Integration) | | | | | | | | |
| NPR 3 | | | | | | | | |
| Production Option 4 (Lot 4) | | | | | | | | |
| CGTS DT/OT II | | | | | | | | |
| IOC Oceana | | | | | | | | |
| IOC Beaufort | | | | | | | | |
| IOC Fallon/Lemoore | | | | | | | | |
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R-1 SHOPPING LIST - Item No. 176

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 31 of 47)

UNCLASSIFIED

CLASSIFICATION:

| | | | | | | | | |
|---|---|---------|---------|---------|---|---------|-------------------------------|---------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | | | | PROJECT NUMBER AND NAME W2124/Air Warfare Training Development | | | |
| COST (\$ in Millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Project Cost | 1.942 | 2.065 | 1.658 | 1.499 | 1.532 | 1.844 | 1.877 | 1.912 |
| RDT&E Articles Qty | | | | | | | | |

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project transitions new training system technologies for use in naval aviation training. Products from this effort directly support the Navy and Marine Corps Aviation Simulation Master Plans (ACAT IVM programs), and will support the development and design of future naval aviation training/mission rehearsal systems. Tasks include: 1) Advanced training systems specification development to provide for transportable, modular, High Level Architecture (HLA) compliant, high fidelity Distributed Mission Training (DMT) and mission rehearsal capabilities. Mission rehearsal is defined as the practice of planned tasks and functions critical to mission success using a true-to-life, interactive representation of the expected operating environment. Technologies to be developed and integrated include: DMT weapons server, high resolution helmet mounted, and/or flat panel displays, photographic quality image generation, advanced environmental effects models, radar/infra-red/electro-optic and acoustic sensor simulations; and 2) the Aviation Training Technology Integration Facility (ATTIF), which is a man-in-the-loop test bed for the integration of software, hardware, and networked systems. New technologies will include computer generated forces (CGF) as virtual and constructive entities for threat or friendly interaction. Additionally, "man-in-the-loop" intelligent agents will be integrated to the ATTIF, including an HLA node for participation and benchmarking fleet exercises in the synthetic battle space. This ATTIF capability provides a window to fleet aviators for critical comment, evaluation, and fine tuning of new and innovative technology before it is fielded. Debrief and intelligent training support tools are focused on human performance enhancements for Fleet readiness exercises.

These technologies will both lower total ownership costs of the training systems, and through technology infusion, increase fleet readiness by enhancing overall system fidelity to the projected operating environments.

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| EXHIBIT R-2a, RDT&E Project Justification | | DATE: February 2003 | | | | | | | | | | | | | | | |
|--|---|---|-------|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|--|--|--|--|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | PROJECT NUMBER AND NAME W2124/Air Warfare Training Development | | | | | | | | | | | | | | | |
| B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.562</td><td style="text-align: center;">0.680</td><td style="text-align: center;">0.874</td><td style="text-align: center;">0.817</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.562 | 0.680 | 0.874 | 0.817 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.562 | 0.680 | 0.874 | 0.817 | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; padding: 5px; min-height: 100px;">Develop and integrate (ATTIF) modular architecture components for intelligent wingman, E-2C crew station, intelligent synthetic forces, and tactical communications. Demonstrate low-cost training DMT configurations, while maintaining or increasing fidelity. Demonstrate low cost training and mission rehearsal configurations and evaluate medium fidelity cockpits. Demonstrate low cost Intelligent Training Support Tools (ITST), and evaluate rapid scenario generation tools w/measures of performance (MOP) capability. Analyze, develop, integrate modular components for cockpit avionics, tactical aircraft intelligent agents, (friend/foe), intelligent wingman, E-2C, intelligent synthetic forces and support tools.</div> | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.538</td><td style="text-align: center;">0.481</td><td style="text-align: center;">0.441</td><td style="text-align: center;">0.427</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.538 | 0.481 | 0.441 | 0.427 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.538 | 0.481 | 0.441 | 0.427 | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; padding: 5px; min-height: 100px;">Integrated Forward Looking Infra-Red (FLIR) sensor simulation with sensor host. Demonstrate ability to input variables that affect FLIR imagery, analyze mission rehearsal database interoperability, tool requirements, and analyze/specify cost effective mission rehearsal database interoperability.</div> | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.283</td><td style="text-align: center;">0.758</td><td style="text-align: center;">0.200</td><td style="text-align: center;">0.255</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 0.283 | 0.758 | 0.200 | 0.255 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 0.283 | 0.758 | 0.200 | 0.255 | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; padding: 5px; min-height: 100px;">Developed/specified applications for texture storage, and database material encoding for PC-based image generators (IGs). Develop applications for real-time shadows on PC video cards, and a software-only application that requires no graphics hardware acceleration to implement simulation features. Develop applications for texture storage, volumetric weather on PC image generators.</div> | | | | | | | | | | | | | | | | | |

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|---|---|---|-------|-------|
| EXHIBIT R-2a, RDT&E Project Justification | | DATE: February 2003 | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | PROJECT NUMBER AND NAME W2124/Air Warfare Training Development | | |
| B. Accomplishments/Planned Program (Cont.) | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 |
| Accomplishments/Effort/Subtotal Cost | 0.559 | 0.146 | 0.143 | 0.000 |
| RDT&E Articles Quantity | | | | |
| <p>Upgraded and specified common Instructor Operating Station (IOS) designs to include ITST. Analyze, develop, and integrate (ATTIF) modular architecture components for F/A-18 cockpit avionics, intelligent wingman, E-2C, and intelligent synthetic forces. Upgrade common IOS interface to the Joint Mission Planning System (JMPS) characteristics for mission planning, and for the Navy Aviation Simulation Master Plan (NASMP) debrief tools.</p> | | | | |

R-1 SHOPPING LIST - Item No.

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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|-------------------------------|---------|----------|---------|---------|---------|---------|------------------------------|-------|-------|-------|-------|--------------------------------|-------|-------|-------|-------|-------------------|-------|--------|--------|--------|------------------------|--|--|--|--|----------------------------------|--|--|--|--|--|--|--------|--|--|---------------------------|--------|--|--|--|--------------------|--------|--|--|--|----------------------|--------|--------|--------|--------|-------------------------|--|--|--|--|----------------|-------|--|--|--|-------------------------|--|--|--|--|----------------------------|--|--|--------|--------|----------|-------|--------|--------|--------|
| APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | PROJECT NUMBER AND NAME W2124/Air Warfare Training Development | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 35%;">Funding:</th> <th style="text-align: right; width: 15%;">FY 2002</th> <th style="text-align: right; width: 15%;">FY 2003</th> <th style="text-align: right; width: 15%;">FY 2004</th> <th style="text-align: right; width: 15%;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget:</td> <td style="text-align: right;">1.887</td> <td style="text-align: right;">2.115</td> <td style="text-align: right;">2.163</td> <td style="text-align: right;">1.832</td> </tr> <tr> <td>Current BES/President's Budget</td> <td style="text-align: right;">1.942</td> <td style="text-align: right;">2.065</td> <td style="text-align: right;">1.658</td> <td style="text-align: right;">1.499</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">0.055</td> <td style="text-align: right; border-top: 1px solid black;">-0.050</td> <td style="text-align: right; border-top: 1px solid black;">-0.505</td> <td style="text-align: right; border-top: 1px solid black;">-0.333</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td> Congressional program reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional undistributed reductions</td> <td></td> <td style="text-align: right;">-0.012</td> <td></td> <td></td> </tr> <tr> <td> Congressional rescissions</td> <td style="text-align: right;">-0.004</td> <td></td> <td></td> <td></td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td style="text-align: right;">-0.023</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Economic Assumptions</td> <td style="text-align: right;">-0.005</td> <td style="text-align: right;">-0.038</td> <td style="text-align: right;">-0.043</td> <td style="text-align: right;">-0.035</td> </tr> <tr> <td> Sponsor/FMB/NAVAIR Adj.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Reprogrammings</td> <td style="text-align: right;">0.087</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Other Navy/OSD Adjustments</td> <td></td> <td></td> <td style="text-align: right;">-0.462</td> <td style="text-align: right;">-0.298</td> </tr> <tr> <td> Subtotal</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">0.055</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">-0.050</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">-0.505</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">-0.333</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p>Modular Architecture for the NASMP Threat Server will slip from FY04 to FY05.</p> <p>Modular Architecture for the NASMP Environmental Server will slip from FY05 to FY06.</p> <p>The ITST upgrades for NASMP will slip from FY06 to FY07.</p> <p style="margin-top: 40px;">Technical: Not applicable.</p> | | | | | Funding: | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Previous President's Budget: | 1.887 | 2.115 | 2.163 | 1.832 | Current BES/President's Budget | 1.942 | 2.065 | 1.658 | 1.499 | Total Adjustments | 0.055 | -0.050 | -0.505 | -0.333 | Summary of Adjustments | | | | | Congressional program reductions | | | | | Congressional undistributed reductions | | -0.012 | | | Congressional rescissions | -0.004 | | | | SBIR/STTR Transfer | -0.023 | | | | Economic Assumptions | -0.005 | -0.038 | -0.043 | -0.035 | Sponsor/FMB/NAVAIR Adj. | | | | | Reprogrammings | 0.087 | | | | Congressional increases | | | | | Other Navy/OSD Adjustments | | | -0.462 | -0.298 | Subtotal | 0.055 | -0.050 | -0.505 | -0.333 |
| Funding: | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Previous President's Budget: | 1.887 | 2.115 | 2.163 | 1.832 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current BES/President's Budget | 1.942 | 2.065 | 1.658 | 1.499 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Adjustments | 0.055 | -0.050 | -0.505 | -0.333 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Summary of Adjustments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional program reductions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional undistributed reductions | | -0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional rescissions | -0.004 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SBIR/STTR Transfer | -0.023 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Economic Assumptions | -0.005 | -0.038 | -0.043 | -0.035 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sponsor/FMB/NAVAIR Adj. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reprogrammings | 0.087 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Congressional increases | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other Navy/OSD Adjustments | | | -0.462 | -0.298 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal | 0.055 | -0.050 | -0.505 | -0.333 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

R-1 SHOPPING LIST - Item No. 176

UNCLASSIFIED

Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 35 of 47)

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CLASSIFICATION:

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|---|--|--|---|--|--|---|----------------------------|--|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | | | PROJECT NUMBER AND NAME W2124/Air Warfare Training Development | | | |

D. OTHER PROGRAM FUNDING SUMMARY:

| Line Item No. & Name | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | To Complete | Total Cost |
|--|---------|---------|---------|---------|---------|---------|---------|---------|-------------|------------|
| APN Line 48 BA-7 (47C2) Commond Ground Equi (USMC Aviation Simulation Master Plan) | 0.387 | 22.078 | 6.250 | 0.000 | 19.950 | 3.200 | 0.000 | 6.900 | | |
| APN Line 33 BA-7 (47C2) Commond Ground Equipment (Fleet Aircrew Simulator Training (FAST) Plan) | | 59.399 | 31.009 | 70.872 | 96.949 | 58.216 | 58.409 | 59.038 | | |

Related RDT&E
(U) P.E. 0604245N, Project # H2279, Sub-Project Title: USMC H-1 Upgrades

E. ACQUISITION STRATEGY:

Air Warfare Training Development (AWTD) is a joint 6.4 R&D technology transition team, working closely with the Navy and Marine Corps Aviation Simulation Master Plans. A true, multidisciplinary Integrated Product Team (IPT) approach is utilized through a combination of reimburseable and direct cite/MIPR contract processes to accomplish the IPT's principal objectives.

F. MAJOR PERFORMERS:

UNCLASSIFIED

CLASSIFICATION:

| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
|------------------------------------|------------------------|--------------------------------|--|------------|------------------|--|------------------|---------------------|------------------|------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | | PROJECT NUMBER AND NAME | | | | | | |
| RDT&E, N / BA-7 | | | 0204571N/Consolidated Training Systems Development | | | W2124/Air Warfare Training Development | | | | | | |
| 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 |
| Systems Engineering | MIPR | Air Force Research Lab | 1.905 | 0.470 | 01/03 | 0.441 | 01/04 | 0.400 | 01/05 | Continuing | Continuing | |
| Systems Engineering | WX&WR | NAWCTSD, NAMRL | 3.818 | 0.730 | 01/03 | 0.690 | 01/04 | 0.495 | 01/05 | Continuing | Continuing | |
| Systems Engineering | MIPR | ONR | 0.120 | | | | | | | | 0.120 | |
| Systems Engineering | WX | NAWC-WD | 0.753 | | | | | | | | 0.753 | |
| Systems Engineering | MIPR | US AF ACADEMY | 0.040 | | | | | | | | 0.040 | |
| Systems Engineering | WR | NPGS | 0.090 | | | | | | | | 0.090 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Subtotal Product Development | | | 6.726 | 1.200 | | 1.131 | | 0.895 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Trainer Development Support | RX | NAWC-AD | 0.539 | 0.130 | 01/03 | 0.135 | 01/04 | 0.135 | 01/05 | Continuing | Continuing | |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| Subtotal Support | | | 0.539 | 0.130 | | 0.135 | | 0.135 | | Continuing | Continuing | |
| Remarks: N/A | | | | | | | | | | | | |

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CLASSIFICATION:

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|---|------------------------|--------------------------------|---|------------|------------------|---|------------------|------------|------------------|----------------------------|------------|--------------------------|
| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | | | DATE: February 2003 | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | PROGRAM ELEMENT 0204571N/Consolidated Training Systems Development | | | PROJECT NUMBER AND NAME W2124/Air Warfare Training Development | | | | | | |
| 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 |
| Developmental Test & Evaluation | WX | NAWCAD | 3.165 | 0.700 | 01/03 | 0.369 | 01/04 | 0.456 | 01/05 | Continuing | Continuing | |
| Developmental Test & Evaluation | WX | NCTAMSLANT | 0.564 | | | | | | | | 0.564 | |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Subtotal T&E | | | 3.729 | 0.700 | | 0.369 | | 0.456 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Travel | WX | NAWC-WD | 0.112 | 0.035 | 01/03 | 0.023 | 01/04 | 0.013 | 01/05 | Continuing | Continuing | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Subtotal Management | | | 0.112 | 0.035 | | 0.023 | | 0.013 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 11.106 | 2.065 | | 1.658 | | 1.499 | | Continuing | Continuing | |
| Remarks: | | | | | | | | | | | | |

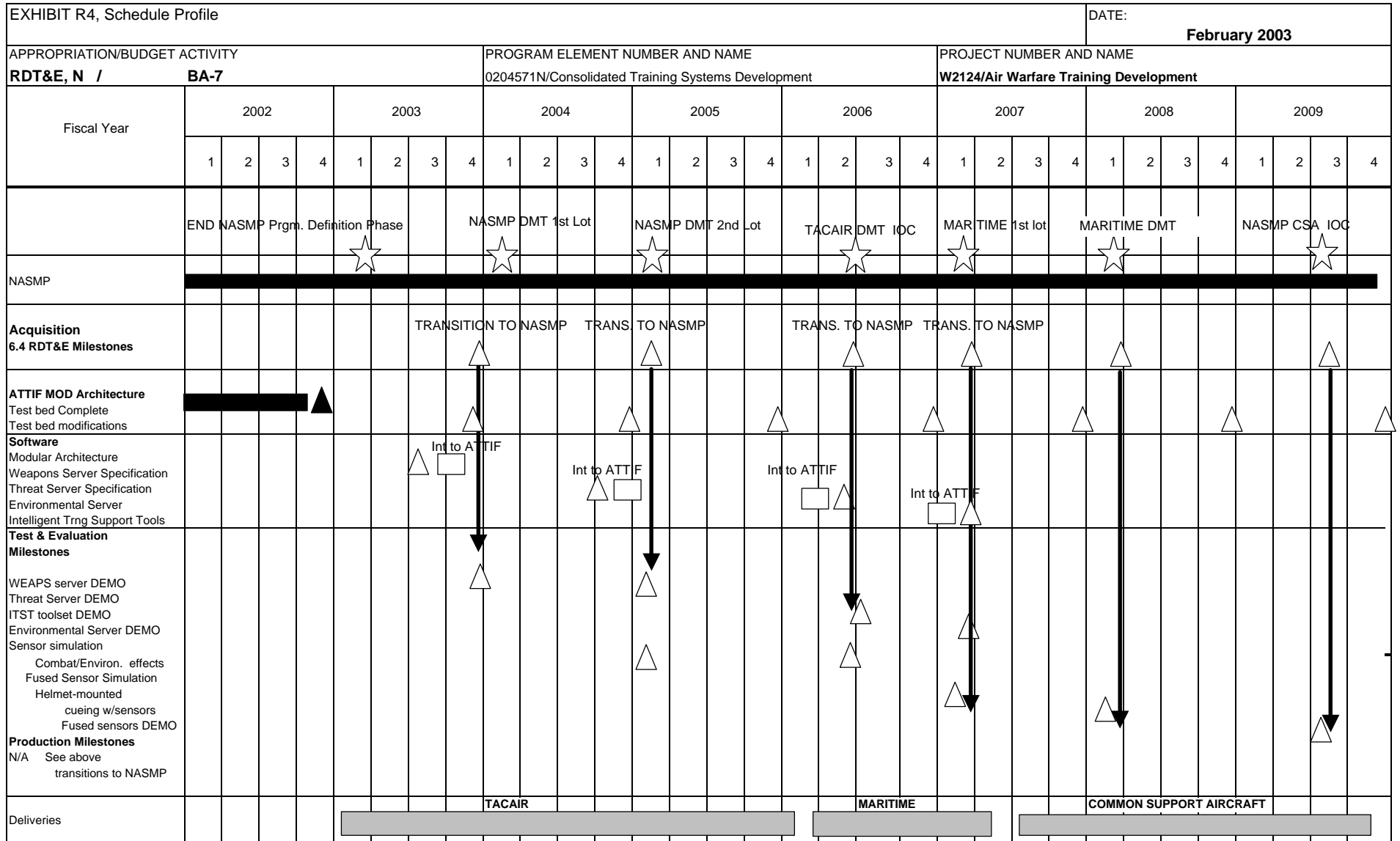
R-1 SHOPPING LIST - Item No. 176

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 38 of 47)

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CLASSIFICATION:



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* Not required for Budget Activities 1, 2, 3, and 6

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Exhibit R-4, Schedule Profile
(Exhibit R-4, page 39 of 47)

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CLASSIFICATION:

[illegible]

R-1 SHOPPING LIST - Item No. 176

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 40 of 47)

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CLASSIFICATION:

| | | | | | | | | | | | |
|---|-----------|---|---------|---------|---------|---------|---------|--|---------|-------------------------------|---------------|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | | | | | | PROJECT NUMBER AND NAME X1823/Training & Modeling Systems (TMS) | | | |
| COST (\$ in Millions) | Total Pys | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | Cost To Complete | Total Program |
| Project Cost | 44.196 | 12.519 | 10.552 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 67.267 |
| RDT&E Articles Qty | | | | | | | | | | | |
| <p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>Employing naval forces in multi-dimensional warfare is a complex operational problem. Naval staffs must be prepared to operate either as an integral part of a Joint Force, or as separate Naval units. To counter the threat expected in hostile environments, naval officer training must cover all mission areas on a real-time basis at the Joint Staff as well as Battle Force/Group levels. Focus must be on tactical decision-making, tactics development/evaluation, and operational planning and execution. Shore-based classroom training and at-sea exercises have historically satisfied the Battle Group tactical training requirement. However, the effectiveness of this approach to training was reduced by the lack of a real-time decision-making environment during shore-based training and the reduction in number and scope of at-sea exercises. This requirement is fulfilled by the Joint Simulation System (JSIMS), which will replace the legacy Research, Engineering and Systems Analysis System (RESA), and the legacy Enhanced Naval Warfare Gaming System (ENWGS).</p> <p>The mission of JSIMS is to provide a readily available, operationally valid synthetic environment for the Commanders-in-Chief (CINCs), their components, other Joint organizations and the Services to: Jointly train, educate, develop doctrine and tactics, formulate and assess operational plans, assess war fighting situations, define operational requirements, and provide operational inputs to the acquisition process. In short, JSIMS will provide not only an improved certified capability for inter-Service operability but also an enhanced Joint Battle Staff training capability for the war fighting CINCs. All service Executive Agents (EAs) and Development Agents (DAs) are required to contribute to the initial population of the JSIMS architecture with facilities, services and tools, to meet an Initial Operating capability for Joint Task Force training of September 2005. Because the Services/components are best able to define their own capabilities and functionality, the JSIMS Alliance Executive Office (AEO) is working in concert with the Services to integrate Service-provided functionality into JSIMS for use in Joint and service exercises.</p> <p>In June 1994 the Services and Director, Joint Program Office signed a Memorandum of Agreement (MOA) to establish JSIMS, a critical next-generation Modeling and Simulation (M&S) system. That framework provides a balanced melding of live, virtual and constructive M&S representations, with Command, Control, Communications, Computers and Intelligence (C4I) fully supported, and interfaces using real-world equipment. As the Maritime Warfare EA, OPNAV N7, on 29 August 1995, assigned NAVSEA as the JSIMS Maritime Development Agent (DA). JSIMS Maritime is developing the Maritime Mission Space Objects for the JSIMS Program, as well as selected portions of the core infrastructure and services. The objective of the JSIMS Maritime portion of the JSIMS Program is to interface with JSIMS and enable Naval senior staffs, and Naval components of Joint staffs, train at all levels of command, in all warfare areas, including joint and service specific training. JSIMS was transferred from NAVSEA to SPAWAR PD13 at the beginning of FY 1999. Due to a reorganization at SPAWAR, the JSIMS-M Program now resides in PD15. On 16 December 1999, USD (AT&L) directed that JSIMS be reorganized per the recommendations made by the JSIMS Senior Review Board, detailed in a 19 November 1999 memorandum. Specifically, JSIMS was directed to convert system architecture to the High-Level Architecture (HLA) standard, establish a JSIMS Alliance Executive Office, develop a new Acquisition Program Baseline (APB), and transfer Program Executive Office (PEO) responsibilities from Air Force to Army. USD (AT&L) has also designated JSIMS as an ACAT-1D program. By end 2001, JSIMS adopted a Block spiral development structure, with software versions, version releases and engineering release milestones numbered commonly. E.g., Block 1 contains work on software Version 1.0, to be released at Version Release Milestone 1 (VRM 1) in Q4, FY2002. Each Block was to have separate acquisition milestone reviews.</p> <p>By PDM1, 12 Dec 02, OSD deleted funding from this Navy program for years FY04-FY09.</p> | | | | | | | | | | | |

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 41 of 47)

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CLASSIFICATION:

| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | |
|---|---|--|-------------------------------|-------|--|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|--|--|--|--|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | PROJECT NUMBER AND NAME X1823/Training & Modeling Systems (TMS) | | | | | | | | | | | | | | | | | |
| (U) B. Accomplishments/Planned Program | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">1.183</td><td style="text-align: center;">1.461</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 1.183 | 1.461 | 0.000 | 0.000 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 1.183 | 1.461 | 0.000 | 0.000 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; min-height: 100px; margin-top: 10px;"></div> | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; min-height: 100px; margin-top: 10px;"></div> | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">2.585</td><td style="text-align: center;">2.978</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 2.585 | 2.978 | 0.000 | 0.000 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 2.585 | 2.978 | 0.000 | 0.000 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; min-height: 100px; margin-top: 10px;"></div> | | | | | | | | | | | | | | | | | | | |
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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | | | | | | | | | | | | | | | | |
|--|---|--|----------------------------|-------|--------------------------------------|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|-------------------------|--|--|--|--|
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | PROJECT NUMBER AND NAME X1823/Training & Modeling Systems (TMS) | | | | | | | | | | | | | | | | | |
| (U) B. Accomplishments/Planned Program (Cont.) | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">4.052</td><td style="text-align: center;">3.536</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | | | FY 02 | FY 03 | FY 04 | FY 05 | Accomplishments/Effort/Subtotal Cost | 4.052 | 3.536 | 0.000 | 0.000 | RDT&E Articles Quantity | | | | |
| | FY 02 | FY 03 | FY 04 | FY 05 | | | | | | | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 4.052 | 3.536 | 0.000 | 0.000 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; min-height: 150px; margin-top: 10px;"><p>FY02: Provided unit-tested Maritime Federate and master track processor software for JSIMS Version 1.0</p><p>FY03: Supported expanded Validation Events for Version 1.0.</p></div> | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tbody><tr><td style="width: 25%;">Accomplishments/Effort/Subtotal Cost</td><td style="width: 15%; text-align: center;">4.699</td><td style="width: 15%; text-align: center;">2.577</td><td style="width: 15%; text-align: center;">0.000</td><td style="width: 15%; text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> | | | | | Accomplishments/Effort/Subtotal Cost | 4.699 | 2.577 | 0.000 | 0.000 | RDT&E Articles Quantity | | | | | | | | | |
| Accomplishments/Effort/Subtotal Cost | 4.699 | 2.577 | 0.000 | 0.000 | | | | | | | | | | | | | | | |
| RDT&E Articles Quantity | | | | | | | | | | | | | | | | | | | |
| <div style="border: 1px solid black; min-height: 150px; margin-top: 10px;"><p>FY02: Provided engineering verification test (EVT) results for Maritime Federate software for JSIMS Version 1.0. Began to plan functional verification testing for Maritime Federate software for Version 2.0. Delivered assigned software products to support Maritime workstation displays and interactive controls to the Common Component Workstation Developer. Provided operational support for JSIMS Alliance integration/system test and user events. Conducted requirements analysis for Maritime workstation for Version Release 2.0. This resource level increased due to the application of \$1.637M BTR for Common Component Workstation development and system validation efforts.</p><p>FY03: Supported expanded Validation Events for Version 1.0.</p></div> | | | | | | | | | | | | | | | | | | | |

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| EXHIBIT R-2a, RDT&E Project Justification | | | DATE: February 2003 | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | PROJECT NUMBER AND NAME X1823/Training & Modeling Systems (TMS) | | |

(U) C. PROGRAM CHANGE SUMMARY:

| Funding: | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|--|---------|---------|---------|---------|
| President's Budget: | 11.308 | 10.825 | 0.000 | 0.000 |
| Current BES/President's Budget | 12.519 | 10.552 | 0.000 | 0.000 |
| Total Adjustments | 1.211 | -0.273 | 0.000 | 0.000 |
| Summary of Adjustments | | | | |
| Section 8123: Management Reform Initiative | -0.100 | | | |
| FY 2002 SBIR Assessment | -0.041 | | | |
| Joint Simulation System (JSIMS) BTR | 1.637 | | | |
| Sec. 313, PL 107-206: Revised Economic Assumptions | -0.024 | | | |
| Sec. 8100 Business Process Reform | - | -0.043 | | |
| Sec. 8135 Economic Assumptions | -0.035 | -0.061 | | |
| Sec. 8109 IT Cost Growth | - | -0.020 | | |
| Sec. 8029 FY03 FFRDC reduction, P.L. 107-248 | - | -0.012 | | |
| Miscellaneous Navy Adjustments | -0.226 | | | |
| Miscellaneous Department Adjustments | - | -0.137 | | |
| Subtotal | 1.211 | -0.273 | 0.000 | 0.000 |

(U) Schedule:

JSIMS Block 1, leading to Version Release Milestone 1.0, slipped 6 months to Dec 2002. By PDM1, 12 Dec 02, OSD deleted funding from this Navy Program, FY04-FY09.

(U) Technical:

Not Applicable

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|---|--|--|---|--|--|--|-------------------------------|--|--|
| EXHIBIT R-2a, RDT&E Project Justification | | | | | | | DATE: February 2003 | | |
| APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7 | | | PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development | | | PROJECT NUMBER AND NAME X1823/Training & Modeling Systems (TMS) | | | |

(U) D. OTHER PROGRAM FUNDING SUMMARY:

| Line Item No. & Name | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | To Complete | Total Cost |
|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|---------------|
| BLI: 2760 / Other SPAWAR Training | 1.754 | 0.980 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | |

E. ACQUISITION STRATEGY: *

The JSIMS joint program adopted an Integrated Product Team approach, which includes members of the Integration and Development contractor, Alliance Executive Office, USJFCOM Joint Warfighting Center, Development Agents, and other supporting staff and agencies to better organize, coordinate, and support overall JSIMS development effort. JSIMS-M uses Working Groups and Integrated Project Teams (IPT), overseen by SPAWAR PMW 153, to estimate necessary resources (primarily software developers) and associated strategies to present to the sponsor (CNO N79) for approval.

JSIMS-M uses a Navy laboratory as its lead developer. JSIMS is using an evolutionary development approach allowing for new and enhanced requirements to be built into subsequent version releases. This method of development allows for incorporation of new requirements and technology through separate iterations giving the user maximum flexibility to ensure each increment captures the latest user priorities, and avoids changes to the ongoing work. The contract(s) supporting JSIMS Maritime development are solicited as multiple-award, IDIQ contract(s) with CPFF pricing in order to adequately address risk to the Government and to ensure a fair and practical risk distribution between the Government and the contractors. This multiple-award scenario was chosen to maintain competition throughout the life of the procurement and to provide contractors with an incentive to lower costs and increase quality. The procurements for COTS hardware for Maritime will be acquired prior to user sites' utilization of JSIMS. Hardware will be acquired from Tier One vendors, using GSA or omnibus sources, and thus should possess inherently high reliability.

While there is no prime development contract within JSIMS-M, there are several development engineering support contracts, none larger than about \$5.0M per year. A Navy Working Capital Fund Activity, the SPAWAR Systems Center San Diego, CA, acts a lead developer, and provides developmental engineering support and reimbursable labor for key positions in the JSIMS-M management structure, most notably the System Engineer and various IPT leads. Various types of contracts are used.

*** Not required for Budget Activities 1,2,3, and 6**

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CLASSIFICATION:

| Exhibit R-3 Cost Analysis (page 1) | | | | | | | | DATE: February 2003 | | | | |
|------------------------------------|------------------------|--------------------------------|--|------------|------------------|---|------------------|---------------------|------------------|------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | | PROJECT NUMBER AND NAME | | | | | | |
| RDT&E, N / BA-7 | | | 0204571N/Consolidated Training Systems Development | | | X1823/Training & Modeling Systems (TMS) | | | | | | |
| 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 |
| Systems Engineering | WR/RCP | VARIOUS | 10.059 | 2.248 | VARIOUS | | | | | | 12.307 | |
| Licenses | WR | SSCSD, CA | 0.536 | | | | | | | | 0.536 | |
| Software Development | WR/RCP | VARIOUS | 7.160 | 3.156 | VARIOUS | | | | | | 10.316 | |
| Software Development | WR | SSCSD, CA | 21.303 | 1.210 | 10/02 | | | | | | 22.513 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Subtotal Product Development | | | 39.058 | 6.614 | | 0.000 | | 0.000 | | | 45.672 | |
| Remarks: | | | | | | | | | | | | |
| Technical Data | WR | SSCSD, CA | 3.525 | 0.654 | 10/02 | | | | | | 4.179 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| | | | | | | | | | | | 0.000 | |
| Subtotal Support | | | 3.525 | 0.654 | | 0.000 | | 0.000 | | | 4.179 | |
| Remarks: | | | | | | | | | | | | |

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CLASSIFICATION:

| Exhibit R-3 Cost Analysis (page 2) | | | | | | | | | | DATE: February 2003 | | |
|------------------------------------|------------------------|--------------------------------|--|------------|------------------|---|------------------|------------|------------------|----------------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY | | | PROGRAM ELEMENT | | | PROJECT NUMBER AND NAME | | | | | | |
| RDTE, N / BA-7 | | | 0204571N/Consolidated Training Systems Development | | | X1823/Training & Modeling Systems (TMS) | | | | | | |
| 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 |
| Developmental Test & Evaluation | WR/RCP | VARIOUS | 4.738 | 1.031 | VARIOUS | | | | | | | |
| Development Test & Evaluation | N/A | SSCSD, CA | 0.962 | 0.688 | 10/02 | | | | | | | |
| Operational Test & Evaluation | WR/RCP | VARIOUS | 0.392 | 0.203 | VARIOUS | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Subtotal T&E | | | 6.092 | 1.922 | | 0.000 | | 0.000 | | | | |
| Remarks: | | | | | | | | | | | | |
| Contractor Engineering Support | WR/RCP | VARIOUS | 5.069 | 0.940 | VARIOUS | | | | | | | |
| Government Engineering Support | WR | SSCSD, CA | 2.746 | 0.357 | 10/02 | | | | | | | |
| Travel | WR/RCP | SPAWAR | 0.225 | 0.065 | VARIOUS | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Subtotal Management | | | 8.040 | 1.362 | | | | | | | | |
| Remarks: | | | | | | | | | | | | |
| Total Cost | | | 56.715 | 10.552 | | 0.000 | | 0.000 | | | | |
| Remarks: | | | | | | | | | | | | |

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 47 of 47)