

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification					DATE:		February 2006	
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-4				Combat Systems Integration/Strike Force Interoperability 0603582N				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost		\$100.974	\$92.310	\$62.095	\$52.173	\$50.846	\$30.244	\$29.768
0164/Combat Systems Integ/Strike Force Interoperability		\$74.649	\$75.810	\$62.095	\$52.173	\$50.846	\$30.244	\$29.768
0164/Maritime Directed Energy Test Center (MDTEC)		\$2.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9356/Advanced Laser Diode Array (ALDA)		\$1.479	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9357/Laser Induced Plasma Channeling (LIPC)		\$12.206	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9527/Application of Novel Laser Systems on Optical Seekers		\$0.971	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9529/Context Adaptable Autonomous & Remote Unmanned System Operation (CARUSO)		\$2.469	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9530/High Energy Laser Application Effects		\$1.645	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9531/Laser Augmented Ship Self Defense (LASSD)		\$1.652	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9532/Unexploded Ordnance Detection Airborne Ground Penetrating Radar (UXO GPR)		\$3.903	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
9999 / Congressional Adds		\$0.000	\$16.500	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>Project 0164: Combat Systems Integration/Strike Force Interoperability:</p> <p>COMNAVSEASYS COM (SEA 06) is assigned central responsibility for interoperability, directing the development of policy and architecture for Strike Force warfare systems engineering and implementation of a common warfare systems engineering process. Furthermore, SEA 06 provides top level direction and execution for certification and assessments which support capability and quality for ships and submarines. SEA 06 has developed processes and tools including the establishment of a force-level warfare systems engineering process, stewardship of the introduction of C5I modernization and improvement into the Fleet Response Plan (FRP), configuration management and certification processes, and force-level interoperability assessments using the Distributed Engineering Plant (DEP) land-based testing tool. This project funds the core elements required to conduct Warfare Systems Integration and Interoperability Testing (WSI2T) in accordance with the Naval Joint Instruction Warfare Systems Certification Policy (NWSCP).</p> <p>This project funds Strike Force (SF) requirements engineering and analysis. This includes SF configuration management through the Fleet Response Plan (FRP), shore based testing and Warfare System Integration and Interoperability Testing (WSI2T) certification of operational computer systems in a test environment similar to their ultimate shipboard operational environment, and Interoperability Assessments (IA) which are a prerequisite for operational Certification of the Strike Force configuration prior to deployment. Force Certification of deploying Strike Force configurations is accomplished through the utilization of the Navy's Distributed Engineering Plant (DEP), which provides operational configurations for all Naval combat systems located at multiple (15) Navy & Industry land-based sites located across the country and connected via ATM networking technology. The DEP provides the only opportunity for comprehensive interoperability testing of combat system and C5I configuration items prior to shipboard delivery for operational use in surface combatant platforms and battle group units. It is a Fleet Forces Command requirement that all Strike Forces undergo Interoperability Assessments (IA) in the DEP prior to deployment. Further, the DEP provides the mechanism to support the Navy's participation in the Joint Distributed Engineering Plant (JDEP) as well as the coalition forces through the Combined Forces Battle Laboratories (CFBL) network to allow for assessments of both Joint and Coalition interoperability. Project funding of international armaments cooperation to include international data exchange (DEA) further improves coalition warfighting.</p> <p>Through the implementation of the Fleet Response Plan (FRP), the Navy has made considerable improvements in Naval Force Interoperability. Interoperability Assessments (IA) testing in the Distributed Engineering Plant has identified recurring interoperability problems, which have then been prioritized into 21 main categories by Strike Group Commanders and their staffs. SEA 06 has prioritized possible interoperability fixes and coordinated with combat system managers to identify how to resolve critical interoperability problems for near term fielding as an interim path to achieving the Navy's combat systems</p>								

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2006		
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-4				R-1 ITEM NOMENCLATURE Combat Systems Integration/Strike Force Interoperability 0603582N				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011

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

Project 0164 Combat Systems Integration/Strike Force Interoperability Continued:

improvements associated to those corrections. In accordance with this direction, the Navy is implementing a plan to fund Common Network Interface (CNI) upgrades to existing legacy COTS hardware on Navy LHAs and develop common interoperable software compliant with the Navy's OA standards to integrate the data from ship's sensors, external links, and FORCEnet sources into an operational picture for the warfighter and an output to the legacy weapons control system.

Project 9356/9357/9527/9530/9531/9532/9999: Directed Energy related efforts:
These Congressional adds fund directed energy and electric weapons development efforts.

Project 9529: Context Adaptable Autonomous & Remote Unmanned System Operation (CARUSO):
This Congressional add funds research of advanced Undersea Unmanned Vehicle (UUV) human/system interaction technologies.

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

RDT&E, N/BA-4

PROGRAM ELEMENT NUMBER AND NAME

0603582N CSI/SFI

PROJECT NUMBER AND NAME

0164 CSI/SFI

B. Accomplishments/Planned Program

SF Requirements Engineering and Analysis		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		2.048	2.538	2.886
RDT&E Articles Quantity		N/A	N/A	N/A

Completed documentation of Phase I of Strike Force Interoperability requirements documentation. In FY05, the program is developing additional scenarios to reflect updated Strike Force Interoperability engineering requirements necessary to respond to the Fleet Response Plan (FRP). In FY06 & FY07, the program will develop multi-mission strike scenarios and evaluate interoperability performance by establishment of levels of operational performance and systems operability. Development of these standards will be essential to the evaluation of emerging combat system capabilities, such as Open Architecture. Continue developing data sets that can be used to apply to quantifiable and measurable Strike Force I/O reqs.

FRP		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		6.521	5.441	5.204
RDT&E Articles Quantity		N/A	N/A	N/A

FY05: Continue execution of the FRP for all Strike Groups in the deployment cycle, including: SFIO efforts, SG Change Control Process, SG Capabilities and Limitations Report and Engineering assessments. Continue configuration management for all strike groups. Continue development of AMPS and Electronic Configuration Control Board (ECCB). In FY06, FY07 and beyond, 25 + Strike Groups are being evaluated in some phase of the Fleet Response Plan (FRP). Over 27 Capabilities and Limitations Documents will be delivered, and over 12000 configuration change requests will be processed.

Platform Certification		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		12.174	9.231	7.307
RDT&E Articles Quantity		N/A	N/A	N/A

FY05-07 plans include Warfare System Integration and Interoperability Testing (WSI2T) of Ship Self Defense System (SSDS) MK-2 Mods 1-2 combat systems and associated elements for CVN/LHD/LHA/LPD ship classes and Test Bed Validation. FY07-FY11 continue planning for out-year PIT to include CVN 77, LCS, LPD 17, CVN 21, Open Architecture combat systems as well as integration of new combat system capabilities.

Strike Force Interoperability Certification		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		8.334	11.200	10.672
RDT&E Articles Quantity		N/A	N/A	N/A

In FY05, conducted DEP testing and data analysis of complex computer program configurations necessary to characterize Strike Force Interoperability of deploying forces. Carrier Strike Group (CSG) Interoperability Assessment (IA) ISO USS RONALD REAGAN. Conducted Interoperability Systems Engineering Tests (ISETs) for root cause determination of key interoperability problems and in support of development of new force level combat system capability. Plans include conducting Interoperability Assessment (IA) testing for USS JOHN C. STENNIS CSG'S FY07 deployment; USS EISENHOWER CSG; and USS VINSON CSG's FY07 deployment. FY06-07 plans include Interoperability Assessments (IAs) for FY08 & 09 deployers as well as collaborative system testing of strike force capabilities.

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2006																
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603582N CSI/SFI	PROJECT NUMBER AND NAME 0164 CSI/SFI																	
B. Accomplishments/Planned Program (Cont.)																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">DEP Engineering and Operations</td> <td style="width: 10%;"></td> <td style="width: 15%;">FY 05</td> <td style="width: 15%;">FY 06</td> <td style="width: 15%;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td>10.600</td> <td>7.081</td> <td>5.638</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </table>					DEP Engineering and Operations		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		10.600	7.081	5.638	RDT&E Articles Quantity		N/A	N/A	N/A
DEP Engineering and Operations		FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		10.600	7.081	5.638															
RDT&E Articles Quantity		N/A	N/A	N/A															
<p>Performs systems engineering, development, test, and assessment of developmental and deploying complex combat system baselines through the use of the Distributed Engineering Plant (DEP). Organize test requirements and develop test procedures assessing root-cause interoperability issues associated with complex computer program configurations for deploying strike force groups. Conduct systems engineering to identify simulation/stimulation requirements necessary to achieve required fidelity for DEP testing at Navy laboratory sites through verification, validation and accreditation. Evaluates network requirements for distributed test events, work with other Service R&D laboratories to identify system and test requirements supporting evaluation of joint system interoperability and the development of open system architecture baselines. Funds critical technical activity in force interoperability necessary to support all user communities of this important land-based test capability. i.e. acquisition; fleet; and industry. In 05: Integrated the Ship Aviation Integration Lab (NAVAIR PAX) and completed integration of Open Architecture Test Facility (OATF). FY06 - FY07 Integrate Combat Systems Engineering Development Site (CSEDS) into DEP network and provide systems and network engineering to support joint and coalition testing events.</p>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Interoperability Fixes</td> <td style="width: 10%;"></td> <td style="width: 15%;">FY 05</td> <td style="width: 15%;">FY 06</td> <td style="width: 15%;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td>1.721</td> <td>1.976</td> <td>0.000</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </table>					Interoperability Fixes		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		1.721	1.976	0.000	RDT&E Articles Quantity		N/A	N/A	N/A
Interoperability Fixes		FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		1.721	1.976	0.000															
RDT&E Articles Quantity		N/A	N/A	N/A															
<p>There are currently 890 unresolved unique interoperability problems identified through SFIT, SGSIT, NCTSI, SSA, TEMP 801 testing, OIF, CLF/CPF lessons learned, and CEC OPEVAL that have been divided into 21 categories prioritized by the Fleet. Funding is dedicated to develop and implement interoperability fixes to combat systems, and to validate and certify completed fixes at the platform and Strike Force level through land-based testing. In accordance with DEPSECDEF Guidance of Oct 2001, interoperability problem corrections are evaluated according to their ability to improve the operational performance of deploying Strike Forces. An additional 26 fixes were available to field in FY2005 that capture system level interoperability fixes, lessons learned from Operation Iraqi Freedom, and coordinated multi-system solutions of strike force interoperability problems in CEC 2.1, SSDS, E2C, AWS 6.1.7, SGS/AC and C2P/CDLMS. FY2005 funds allow for completion of the FY2004 package. FY2006: Funding supports analysis and assessment methodology to identify engineering changes required to correct interoperability at the system design phase. There is no funding programmed for future interoperability fix packages per ASN (RDA) direction.</p>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">JDEP</td> <td style="width: 10%;"></td> <td style="width: 15%;">FY 05</td> <td style="width: 15%;">FY 06</td> <td style="width: 15%;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td>4.876</td> <td>4.600</td> <td>4.960</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </table>					JDEP		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		4.876	4.600	4.960	RDT&E Articles Quantity		N/A	N/A	N/A
JDEP		FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		4.876	4.600	4.960															
RDT&E Articles Quantity		N/A	N/A	N/A															
<p>Funds Navy participation in Joint Distributed Engineering Plant (JDEP) and related land-based test events and systems engineering activities. The Defense Planning Guidance (DPG) updated for FY 2002-2007 states that the JDEP program was established as a DoD-wide effort to link existing service and joint combat system engineering and test sites. The JDEP is the lead infrastructure used for the evaluation of coordinated, joint engineering events, which include the validation of next-generation algorithms implementing the Single Integrated Air Picture (SIAP). Funds support Navy participation in JDEP approved test events and test bed improvements needed to conduct testing. FY05 events included Joint Combined Hardware in the Loop Event (JCHE) Phase II, Sea Based BMD/Early Warning and Multi-Service Distributed Engineering Events. FY06 events include Link 16/Coalition Networking, IABM, and SPYOA proposals. In FY06 and FY07, JDEP will support initiatives in alignment with OSD Joint Testing Roadmap signed 12 November 2004 to include JCHE follow-on Phases and Joint Battle Management Command and Control (JBMC2) Roadmap Joint Mission Thread (JMT) validation.</p>																			

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT NUMBER AND NAME

PROJECT NUMBER AND NAME

RDT&E,N/BA-4

0603582N CSI/SFI

0164 CSI/SFI

B. Accomplishments/Planned Program (Cont.)

REAGAN Strike Force Interoperability		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		3.375	0.000	0.000
RDT&E Articles Quantity		N/A	N/A	N/A

The USS RONALD REAGAN (CVN 76), its associated combat system, and other Strike Group (SG) upgrades, is a complex convergence of multiple platforms, systems, and sub-systems. In FY2005, funds were focused on completing Phases II through IV of a 4 phase REAGAN Strike Group Team Strategy that supports (FRP). The Phase II events were designed to characterize the performance of SPQ-9B and BFIT, advanced Detect to Engage (DTE), Strike Group I/O, Link 4A/11/16, Composite Surface Tracking, and Low/Slow Flyer. Phase III events were designed to demonstrate the performance of Advance DTE, Link 4A/11/16, complete missile firings, Strike Group Track Management and SG level reporting/weapons coordination. Phase IV efforts focused on training and I/O evaluation during pre-Combat System Ship Qualification Trial (CSSQT) and CSSQT events. These combined efforts are critical to finalizing the delivery of a fully mission capable REAGAN Strike Group that is interoperable with the force.

CNI/OA Transformation Roadmap		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		25.000	25.243	25.428
RDT&E Articles Quantity		N/A	N/A	N/A

In FY2005, funds provide for SBIR Phase III efforts to develop Common Network Interface Capabilities for the ESG Commander and Staff to direct Battleforce Operations.

The Common Network Interface (CNI) is a Commercial Off-The-Shelf (COTS) open interface system designed to modernize C4I and Combat Systems (C5I) on ships not programmed to receive Open Architecture (OA) upgrades. CNI is an Open Architectural Situational Awareness "machine" providing the Joint Track Manager/OATM linkage to the ACDS Block 0 in LHA/LHD. In FY2006, begin phased CNI upgrades to the existing legacy COTS hardware and common interoperable software compliant with the Navy's OA standards to integrate the data from ship's sensors, external links, and FORCEnet sources into an operational picture for the warfighter and an output to the legacy weapons control system. In FY2007, these operational capability improvements are achieved in a cost effective manner by initiating spiral development, "build-test-build" programmatic and processes pioneered by the Acoustics Rapid COTS Insertion (ARCI) and Advanced Processing Build (APB) processes which minimizes legacy system/subsystem technical disruption. CNI ensures the upgraded ships stay current with Navy Open Architecture and Joint

OA Automated Test and Re-Test		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		N/A	8.500	0.000
RDT&E Articles Quantity		N/A	N/A	N/A

Open Architecture Automated Test and Re-Test Capability: Funds added to program to support software engineering upgrades to the Distributed Engineering Plant (DEP) Laboratories to enable rapid test and re-test of Open Architecture software modules and associated improvements. In FY06, funds are needed to establish the requirements and architecture necessary for the DEP to test the rapid and affordable introduction of new capabilities into future combat systems.

MDTEC (Maritime Directed Energy Test)		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		2.000	0.000	0.000
RDT&E Articles Quantity		N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
Project 0164 MDTEC funding was provided to accomplish the Directed Energy Study as directed by Congress.

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603582N CSI/SFI	PROJECT NUMBER AND NAME 0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI

C. PROGRAM CHANGE SUMMARY:

	FY 2005	FY 2006	FY 2007
Funding:			
FY06 President's Budget:	74.339	76.975	65.436
FY07 President's Budget:	76.649	75.810	62.095
Total Adjustments	2.310	-1.165	-3.341
Summary of Adjustments			
Other General Provisions	-0.093	-1.165	
BTR	3.375		
SBIR	-0.972		
Other misc. changes			-3.341
Subtotal	2.310	-1.165	-3.341

Schedule:
See R4/R4A Schedule.

Technical:

R-1 SHOPPING LIST - Item No. 54

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603582N CSI/SFI	PROJECT NUMBER AND NAME 0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI

D. OTHER PROGRAM FUNDING SUMMARY:

Related RDT&E: Computer programs developed under these programs are tested in their integrated configuration.

PE 0204571N (Consolidated Training Systems Development)
 PE 0205620N (Surface ASW Combat System Technology)
 PE 0603382N (Advanced Combat System Technology)
 PE 0603755N (Ship Self Defense Dem/Val)
 PE 0603658N (Cooperative Engagement Capability)
 PE 0604307N (AEGIS Combat Systems Engineering)
 PE 0604755N (Ship Self Defense - EMD)
 PE 0604518N (CIC Conversion/Common Command and Decision)
 PE 0603879N (Single Integrated Air Picture)
 PE 0605853N (CHENG)
 PE 0603925N Directed Energy and Electric Weapon Systems

Related Procurement:
 OPN 296000 (ICSTF/DEP: Integrated Combat System Test Facility/Distributed Engineering Plant)

<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>
\$4.6	\$4.3	\$4.3	\$4.4	\$4.6	\$4.7	\$4.9

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS:

Naval Surface Warfare Center, Dahlgren Division, VA - Distributed Engineering Plant (DEP), Strike Force Interoperability Requirements (SFIR), and Strike Force Interoperability Operational Advisory Group (SFI OAG) efforts.
 General Dynamics - Advanced Information Systems (GD-AIS) Digital Systems Resources, Inc. (DSR), Fair Lakes, VA- Prime contractor for Common Network Interface (CNI).

CLASSIFICATION:















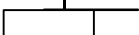

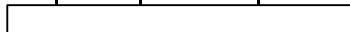
UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)					DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			PROJECT NUMBER AND NAME								
RDT&E,N/BA-4			0603582N CSI/SFI								
Cost Categories	Contract Method & Type	Performing Activity & Location	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SF Interoperabilitiy Requirements	WR/RC	NSWC	0.637	10/04	0.757	10/05	1.027	10/06	CONT.	CONT.	
SF Interoperabilitiy Requirements	WR/RC	VARIOUS	1.500	10/04	1.432	10/05	1.859	10/06	CONT.	CONT.	
FRP	WR/RC	NSWC PHD	2.641	10/04	2.892	10/05	3.266	10/06	CONT.	CONT.	
FRP	WR/RC	NSWC DD	2.772	10/04	2.092	10/05	1.938	10/06	CONT.	CONT.	
FRP	WR/RC/PD	VARIOUS	1.108	10/04	0.000		0.000		CONT.	CONT.	
Platform Certification	WR/RC	NSWC PHD	7.932	10/04	6.900	10/05	6.174	10/06	CONT.	CONT.	
Platform Certification	WR/RC	VARIOUS	1.882	10/04	1.666	10/05	1.133	10/06	CONT.	CONT.	
Strike Force Interoperability Cert	WR/RC	NSWC DD	2.350	10/04	10.200	10/05	4.144	10/06	CONT.	CONT.	
Strike Force Interoperability Cert	WR/RC/PD	VARIOUS	1.999	10/04	0.000		3.314	10/06	CONT.	CONT.	
DEP Engineering and Operations	WR/RC	NSWC DD	8.909	10/04	6.111	10/05	5.368	10/06	CONT.	CONT.	
DEP Engineering and Operations	WR/RC/PD	VARIOUS	1.657	10/04	0.000		0.000		CONT.	CONT.	
Interoperability Fixes	WR/RC	NSWC DD	1.295	10/04	1.500	10/05	0.000		CONT.	CONT.	
Interoperability Fixes	WR/RC	NSWC DD-CDSA D	0.500	10/04	0.000		0.000		CONT.	CONT.	
JDEP	WR/RC	NSWC DD	3.331	10/04	3.295	10/05	3.290	10/06	CONT.	CONT.	
JDEP	WR/RC	VARIOUS	1.545	10/04	1.305	10/05	1.670	10/06	CONT.	CONT.	
REAGAN SG	VARIOUS	VARIOUS	3.375	10/05	0.000		0.000		CONT.	CONT.	
CNI/OA Transformation Roadmap	WR/RC	NSWC DD	4.000	10/04	7.532	10/05	6.500	10/06	CONT.	CONT.	
CNI/OA Transformation Roadmap	VARIOUS	VARIOUS	21.000	11/04	17.711	11/05	18.928	11/06	CONT.	CONT.	
OA Test and Retest	VARIOUS	VARIOUS	0.000		8.500	10/05	0.000		CONT.	CONT.	
Contract Engineering Support	VARIOUS	VARIOUS	4.866	11/04	2.567	11/05	2.134	11/06	CONT.	CONT.	
Contract Program Mgt Support	VARIOUS	VARIOUS	1.100	11/04	1.100	11/05	1.100	11/06	CONT.	CONT.	
Travel		NAVSEA TRAVEL	0.250	09/05	0.250	09/06	0.250	09/07	CONT.	CONT.	
Subtotal Product Development			74.649		75.810		62.095				
Remarks:											

R-1 SHOPPING LIST - Item No. 54

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 8 of 12)

EXHIBIT R4, Schedule Profile										UNCLASSIFIED				DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-4										PROJECT NUMBER AND NAME 0164					
Fiscal Year			2005				2006				2007				
Quarter			1	2	3	4	1	2	3	4	1	2	3	4	
CVN 76 WSI2T															
LSD 41/49 WSI2T															
LPD 17/18/19 WSI2T															
FFG 7 LEVEL 13 WSI2T															
CVN 75 WSI2T															
FFG 7 LEVEL 12 WSI2T															
LHD 2/4/5 WSI2T															
CVN 68 WSI2T															
LHA 2 WSI2T															
LHA 2/4 WSI2T															
CVN 70 WSI2T															
CV 63, CVN 65/73 WSI2T															
CVN 74 WSI2T															
CVN 69 WSI2T															
LHD 3/6 WSI2T															
LHA 1/5 WSI2T															
CVN 71/72 WSI2T															
CVN 77 WSI2T															

R-1 SHOPPING LIST - Item No. 54

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 9 of 12)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2006		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-4						PROJECT NUMBER AND NAME 0164 CSI/SFI		
Schedule Profile		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	ABRAHAM LINCOLN FIT							
	GEORGE WASHINGTON FIT							
	HARRY S. TRUMAN FIT							
	NIMITZ FIT							
	THEODORE ROOSEVELT FIT							
	ENTERPRISE FIT							
	SEE -01	1Q	1Q	1Q	1Q			
	SEE -02	1Q	1Q	1Q	1Q			
	SEE -03	2Q	2Q					
	SEE -04	3Q	3Q					
	SEE -05	3Q						
	SEE -06	4Q						
	LHA 1/5 WSI2T	4Q	1Q					
	FFG 7 WSI2T							
	CVN 76 WSI2T	1/2/3Q		1Q/2Q				
	LSD 41/49 WSI2T	3Q/4Q						
	FFG 7 LEVEL 13 WSI2T							
	FFG 7 LEVEL 12 WSI2T	2Q/3Q						
	LHD 2/4/5 WSI2T		3Q/4Q					
	SSDS MK2 MOD1 WSI2T(CVN 68)	1Q						
	LHA 4 WSI2T	2Q/3Q	1Q/2Q					
	CVN 74 WSI2T	1/2/3/4Q						
	CV63, CVN 65/73 WSI2T							
	CVN 71/72/75 WSI2T		2Q/3Q					
	SSDS MK2 MOD 1 WSI2T (CVN 69)	1Q/2Q/3Q		1Q/2Q				
	LHD 3/6 WSI2T	3Q/4Q						
	CVN 70 WSI2T				3Q/4Q			
	CVN 68 WSI2T		1Q/2Q					
	CVN 77 WSI2T			1-4Q	1-3Q			
	LHD 1/4/5 WSI2T				2Q/3Q			
	NAVY JOINT TEST	4Q	3Q/4Q					

R-1 SHOPPING LIST - Item No. 54

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 10 of 12)

UNCLASSIFIED

EXHIBIT R4, Schedule Profile										DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME RDT&E,N/BA-4 0603582N SFI										PROJECT NUMBER AND NAME 0164			
Fiscal Year		2005				2006				2007			
Quarter		1	2	3	4	1	2	3	4	1	2	3	4
SEE 05-01		▲											
FSEC CEC/LTN Event		▲											
SEE 05-02		▲											
IA 05-01			▲										
SEE 05-03				▲									
DEP VV&A				△									
SEE 05-04				△									
JDEP EW/SBBMD				△									
SEE 05-05				△									
IA 05-02				△									
JDEP DTE5				△									
SEE 05-06				△									
DEP VV&A				△									
SEE 06-01				△									
IA 06-01				△									
SEE 06-02				△									
SEE 06-03				△									
IA 06-02				△									
SEE 06-04				△									
IA 06-03				△									
IA 06-04				△									
DEP VV&A				△						△			
SEE 07-01										△			
IA 07-01										△			
SEE 07-02										△			
SEE 07-03													
IA 07-02											△		
SEE 07-04													
IA 07-03													
IA 07-04													
DEP VV&A													△

R-1 SHOPPING LIST - Item No. 54

NOTE 1: 6 SEEs and 2 IA's are scheduled for FY07

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2006																
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603582N CSI/SFI	PROJECT NUMBER AND NAME 9999 / Various Congressional Plus Ups																	
B. FY06 Congressional Plus Ups																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Lasers for Navy Applications</td> <td style="width: 10%;"></td> <td style="width: 15%;">FY 05</td> <td style="width: 15%;">FY 06</td> <td style="width: 15%;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td>0.000</td> <td>3.400</td> <td>0.000</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </table> <p style="margin-top: 10px;">These funds were provided by Congressional Plus Up. Proj #9823N (\$3,400K) will continue to provide the analyses associated with laser charring of composite radomes and the resultant decrease of the signal-to-noise ratio that would cause the incoming missile to break lock and decrease its Pk. Funds are required to plan, accomplish, and analyze full-scale static tests using the existing to perform laser-induced charring on actual anti-ship missiles.</p>					Lasers for Navy Applications		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		0.000	3.400	0.000	RDT&E Articles Quantity		N/A	N/A	N/A
Lasers for Navy Applications		FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		0.000	3.400	0.000															
RDT&E Articles Quantity		N/A	N/A	N/A															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">LIPC (Laser Induced Plasma Channeling)</td> <td style="width: 10%;"></td> <td style="width: 15%;">FY 05</td> <td style="width: 15%;">FY 06</td> <td style="width: 15%;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td>0.000</td> <td>11.100</td> <td>0.000</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </table> <p style="margin-top: 10px;">These funds were provided by Congressional Plus Up. Project 9357C funding (\$11,100K) is provided for the development and delivery of a mobile prototype at increased power and range.</p>					LIPC (Laser Induced Plasma Channeling)		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		0.000	11.100	0.000	RDT&E Articles Quantity		N/A	N/A	N/A
LIPC (Laser Induced Plasma Channeling)		FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		0.000	11.100	0.000															
RDT&E Articles Quantity		N/A	N/A	N/A															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Optical Line Replacement Units</td> <td style="width: 10%;"></td> <td style="width: 15%;">FY 05</td> <td style="width: 15%;">FY 06</td> <td style="width: 15%;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td>0.000</td> <td>1.000</td> <td>0.000</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </table> <p style="margin-top: 10px;">These funds were provided by Congressional Plus Up. Project 9824N is for design and development of optical line replaceable units showing increased power densities and increased beam quality for application to tactical High Energy Laser (HEL) Systems.</p>					Optical Line Replacement Units		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		0.000	1.000	0.000	RDT&E Articles Quantity		N/A	N/A	N/A
Optical Line Replacement Units		FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		0.000	1.000	0.000															
RDT&E Articles Quantity		N/A	N/A	N/A															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Trouble Report Information Database</td> <td style="width: 10%;"></td> <td style="width: 15%;">FY 05</td> <td style="width: 15%;">FY 06</td> <td style="width: 15%;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td></td> <td>0.000</td> <td>1.000</td> <td>0.000</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td>N/A</td> <td>N/A</td> <td>N/A</td> </tr> </table> <p style="margin-top: 10px;">These funds were provided by Congressional Plus Up. Project 0164C. Funds provided to extend the Knowledge Management System of the Trouble Report Warehouse to use business modeling practices to monitor Combat System baselines and to alert stakeholders and technical warrant holders of issues that effect Warfare Systems Engineering certification.</p>					Trouble Report Information Database		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		0.000	1.000	0.000	RDT&E Articles Quantity		N/A	N/A	N/A
Trouble Report Information Database		FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		0.000	1.000	0.000															
RDT&E Articles Quantity		N/A	N/A	N/A															