CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: **February 2005**		
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
Total PE Cost	**$102.456**	**$99.099**	**$76.975**	**$65.436**	**$54.797**	**$53.573**	**$33.328**	**$32.904**
0164/Combat Systems Integ/Strike Force Interoperability	**$97.100**	**$74.300**	**$76.975**	**$65.436**	**$54.797**	**$53.573**	**$33.328**	**$32.904**
9356/Advanced Laser Diode Array	**$2.054**	**$1.485**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**
9357/Laser Induced Plasma Channeling	**$3.284**	**$12.487**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**
9527/Application of Novel Laser Systems on Optical Seekers	**$0.000**	**$0.991**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**
9529/Context Adaptable Autonomous & Remote Unmanned System Operation (CARUSO)	**$0.000**	**$2.476**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**
9530/High Energy Laser Application Effects	**$0.000**	**$1.684**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**
9531/Laser Augmented Ship Self Defense	**$0.000**	**$1.684**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**
9532/Unexploded Ordnance Detection Airborne Ground Penetrating Radar	**$0.000**	**$3.962**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**	**$0.000**

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project 0164: Combat Systems Integration/Strike Force Interoperability:

CNO MSG DTG 021648Z May 1998 assigned COMNAVSEASYSCOM (SEA 06) central responsibility for interoperability; directing the development of policy and architecture for Strike Force warfare systems engineering, implementation of a common warfare systems engineering process. Furthermore, SEA 06 provides top level direction and execution for certification and assessment which support capability and quality for ships and submarines. SEA 06 has responded with processes and tools to include: 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 process per FFC MSG DTG 032037Z May 04, and force-level interoperability assessment using the Distributed Engineering Plant (DEP) land-based testing tool. This project funds the core elements required to execute FFC direction.

This project funds: Strike Force (SF) requirements engineering and analysis. SF configuration management through the Fleet Response Plan (FRP), shore based testing and Platform Integration Testing (PIT) certification of operational computer systems in a test environment similar to their ultimate shipboard operational environment, and Interoperability Assessments (IA) which is 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 C4I 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 Assessements (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) to allow for assessments of both Joint and Coalition interoperability.

Through the implementation of the Fleet Response Plan (FRP), the Navy has made considerable improvements in Naval Force Interoperability. Interoperability Assessemnts (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 the fix path to resolve critical interoperability problems for near term fielding as an interim path to achieving the Navy's combat systems way ahead. DEPSECDEF Guidance issued in October 2001 directs the Services to resolve interoperability problems in legacy combat systems by FY08 and develop metrics to evaluate operational 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.

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: **February 2005**		
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
Total PE Cost	**$102.456**	**$99.099**	**$76.975**	**$65.436**	**$54.797**	**$53.573**	**$33.328**	**$32.904**

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

Project 0164 Combat Systems Integration/Strike Force Interoperability:

Additionally, this project funds Navy's implementation of improvements to specific combat systems as required to correct interoperability problems as necessary to achieve a Single Integrated Air Picture (SIAP). The Joint community has established guidelines for problem corrections, to be addressed in incremental Blocks designed to improve the SIAP. A SIAP is the product of fused, near-real-time and real-time data from multiple sensors to allow development of common, continuous, and unambiguous tracks of all airborne objects in the surveillance area. This effort is funded in PE 0603879N in FY05 and beyond.

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

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

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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

B. Accomplishments/Planned Program

FRP	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	7.541	6.787	5.022	5.201
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

FY05: Continue execution of the FRP for all Strike Groups in the deployment cycle, including: SFAO 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 any given year, 25 + Strike Groups are being evaluated in some phase of the Fleet Response Plan (FRP), Over 27 Capabilities and Limitations Documents are delivered, and over 12000 configuration change requests are processed. FY06-11: AMPS and ECCB transition to OMN

Platform Certification	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	11.508	12.441	9.459	9.658
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

FY 04: Conducted Platform Certification Integration Testing (PIT) of Advanced Combat Direction System (ACDS) Block-0, level 10.26.X, ACDS Block-1 2.1.9, Combat Direction System (CDS) level 12.X/13.X in CV/CVN, LSD, and LHD ship classes, SSDS MK-2, Mod 0, and Command and Control Processor (C2P) upgrade. Continued planning for out-year Platform Interoperability Testing (PIT) testing. FY05-07 plans include PIT testing 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. Continue planning for out-year Platform Integration Testing (PIT) testing 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 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	11.783	8.600	12.007	8.936
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

FY04: Conducted DEP testing and data analysis of complex computer program configurations necessary to characterize Strike Force. Interoperability of deploying forces. Carrier Strike Group (CSG) Force Interoperability testing (FIT) in FY 04 supported USS JOHN F. KENNEDY CSG; USS ABRAHAM LINCOLN CSG; USS JOHN C. STENNIS CSG; USS HARRY S. TRUMAN CSG; USS NIMITZ CSG; USS THEODORE ROOSEVELT CSG; USS GEORGE WASHINGTON CSG. 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. In FY05, plans include conduct Interoperability Assessment (IA) testing for USS JOHN C.. STENNIS CSG'S FY07 deployment; USS EISENHOWER CSG; USS RONALD REAGAN CSG; and USS VINSON CSG's FY07 deployment. FY06-07 plans include Interoperability Assessments (IAs) for FY08 & 09 deployers as well as collaboarative system testing of strike force capabilities.

DEP Engineering and Operations	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	10.365	10.866	7.047	6.229
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

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 specific System Engineering Event (SEE). In FY04, completed integration of the Open Architecture Test Facility (OATF) and Lockheed Martin. Evaluate 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 communtities of this important land-based test capability. i.e. acquisition; fleet; and industry. FY05: Integrate the Ship Aviation Integration Lab (NAVAIR PAX). FY06-FY07: DEP Engineering requirements to support testing retained in RDTEN and Operations requirements transition to OMN.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N/BA-4	0603582N CSI/SFI	0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI

B. Accomplishments/Planned Program (Cont.)

Interoperability Fixes	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	12.944	1.721	1.976	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

There are currently 890 unresolved unique interoperability problems identified through Strike Force Interop. Testing (SFIT), Deploying Group System Interop. Testing (DGSIT) , Navy Center for Tactical System Interop. (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 Stike 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. For FY 04 deployers: USS JOHN F KENNEDY Strike Force received 130 fixes that resolve Fleet's top issues. Systems impacted in FY04 include C2P, ACDS Block 0, ACDS Block 1, FFG CDS, E2C, SGS/AC and AWS 6.3. An additional 26 fixes will be available to field in FY05 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 with fielding available beginning May 2005. FY2006: funding supports analysis and assessment methodology to identify engineering changes required to correct interoperability at the system design phase.

JDEP	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	4.703	4.876	4.960	4.950
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

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: 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. FY04 included modeling & simulation improvements and JCHE Phase I. FY05 Events include Tri-Service Distribed Test Event, CAAD Phase IV, JCHE Phase II, Sea-Based BMD. FY06 JDEP to support initiatives in line with OSD Joint Testing Roadmap signed 12 November 2004.

OA Automated Test and Re-Test	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	N/A	N/A	8.500	0.000
RDT&E Articles Quantity	N/A	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. Funds are needed to permit the testing of the rapid and affordable introduction of new capabilities into future combat systems.

REAGAN Strike Force Interoperability	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	7.219	N/A	0.000	0.000
RDT&E Articles Quantity	N/A	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. FY04 funds were focused on completing phases II and III 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 BFTT, 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. These combined efforts are critical to finalizing the delivery of a fully mission capable REAGAN Strike Group that is interoperable with the force. Without them critical Fleet Response Plan (FRP) milestones will not be possible, resulting in a National asset deploying without a thorough and accurate assessment of I/O performance.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N/BA-4	0603582N CSI/SFI	0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI

B. Accomplishments/Planned Program (Cont.)

SF Requirements Engineering and Analysis	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.500	2.048	2.272	2.917
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

Completed documentation of phase I of Strike Force Interoperability requirements documentation. In FY05, intent is to develop additional scenarios to reflect updated Strike Force Interoperability engineering requirements necessary to respond to the Fleet Response Plan (FRP). Specifically, development of multi-mission strike scenarios and evaluation of interoperablity performance by establishment of levels of operational performanc and systems operability. Development of these standards will be essential to the evaluationof emerging combat system capabilities, such as Open Architecture. Continue to develop data sets that can be used to apply to quantifiable and measurable Strike

CNI/OA Transformation Roadmap	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	22.213	25.000	25.732	27.545
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

Funds are for SBIR Phase III efforts to develop Common Network Interface Capabilities for theater and air missile defense.
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. CNI upgrades 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. These operational capability improvements are achieved in a cost effective manner by using the 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 interoperability requirements.

Navy SIAP Improvements	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.612	0.000	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

Navy implementation of combat system corrections as needed to affect a Single Integrated Air Picture (SIAP). Combat systems includes AEGIS.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N/BA-4	0603582N CSI/SFI	0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI

B. Accomplishments/Planned Program (Cont.)

ALDA (Advanced Laser Diode Arrays):	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	2.054	1.485	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
ALDA (Advanced Laser Diode Arrays): Proj #9356 FY04 ($2,054K) The goal of the ALDA effort is the development of 100% Duty Cycle Diode packaging with advanced cooling, and its transition to automated assembly. Previous efforts addressed the cooling of pulsed large area laser diode pump arrays using conventional bulk flowing liquid technology. 100% Duty Cycle Diode arrays are required for all DoD DPSS HEL systems in the near (3-5 year) future. In FY05 ($1,485K) **ALDA** funding was provided to increase the demonstrated percentage of the Duty Cycle Diode packaging.

LIPC (Laser Induced Plasma Channeling)	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	3.284	12.478	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
Proj #9357 FY04 ($3,284K) Funds were used for engineering and demonstration of miniature lasers to determine the maximum extended range and resultant effects associated with this laser guided energy. In FY 05 ($12,478K) LIPC funding was provided to increase the range of LIPC as demonstrated in FY04.

Appl. of Novel Laser Sys. on Optical Seeker	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	0.991	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
Proj #9527 FY 05 ($991K) funding was provided to address the effects of ultra-short laser pulses on components of imaging (focal plane) and non-imaging (reticule) based optical seekers.

High Energy Laser Application Effects	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	1.684	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
Proj #9530 FY05 ($1,684K) funding provides the ability to obtain crucial data for defining laser weapon effects at defined wavelengths and secondarily, provides data for solving critical problems encountered in laser beam delivery in ship manufacturing applications.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E,N/BA-4	0603582N CSI/SFI	0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI	

B. Accomplishments/Planned Program (Cont.)

Laser Augmented Ship Self Defense	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	1.684	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
Proj #9531 FY05 ($1,684K) funding will 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 an existing to perform laser-induced charring on actual anti-ship missiles.

Unexploded Ordnance Detection Airborne Ground Penetrating Radar	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	3.962	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
Proj #9532 FY05 ($3,962K) funding is to perform the environmental impact studies required to clear unexploded ordnance.

Context Adaptable Autonomous & Remote Unmanned System Operation (CARUSO)	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	2.476	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

These funds were provided by Congressional Plus Up.
Proj #9529 ($2,476K) Funds to provide Advanced Undersea Unmanned Vehicle (UUV) human/system interaction technology research; development of common human-centered approaches and solutions for Unmanned Vehicle (UV) control, data retrieval, and information extraction/dissemination; UV human/system interaction empirical test and evaluation. This effort, entitled **CARUSO** will operate a program designed to systematically address and resolve the above issues in an integrated manner.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N/BA-4	0603582N CSI/SFI	0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2004	FY 2005	FY 2006	FY 2007
Previous President's Budget: (FY 05 Pres Controls)	97.969	80.840	40.396	37.330
Current BES/FY06/07 President's Budget:(FY06/07 President's Controls)	102.456	99.099	76.975	65.436
Total Adjustments	4.487	18.259	36.579	28.106
Summary of Adjustments				
SBIR/STTR Transfer	1.683			
Congressional Undistributed	0.211			
Programmatic Adjustments	2.593	18.259	36.579	28.106
Subtotal	4.487	18.259	36.579	28.106

Schedule:

See R4/R4A Schedule.

Technical:

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N/BA-4	0603582N CSI/SFI	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)

FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011
$8.6	$4.6	$4.4	$4.5	$4.7	$4.8	$4.9	$5.1

E. ACQUISITION STRATEGY: Not Applicable

F. MAJOR PERFORMERS:

Naval Surface Warfare Center, Port Hueneme, CA - Platform Integration Integration Testing/Strike Force Interoperability effort.

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:

Exhibit R-3 Cost Analysis (page 1)

DATE: **February 2005**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E,N/BA-4**

PROJECT NUMBER AND NAME: 0603582N CSI/SFI

Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Platform Certification	WR/RC	NSWC PHD	6.909	8.600	10/03	7.930	10/04	7.309	10/05	7.100	10/06	CONT.	CONT.	
Platform Certification	WR/RC	NSWC DD										CONT.	CONT.	
Platform Certification	WR/RC	VARIOUS	1.741	1.914	10/03	1.930	10/04	1.166	10/05	2.060	10/06	CONT.	CONT.	
SF Interoperabiltiy Requirements	WR/RC	NSWC	1.686	0.500	10/03	0.637		0.638		0.689				
SF Interoperabiltiy Requirements	WR/RC	VARIOUS	1.513			1.500		1.662		1.520				
FRP	WR/RC	NSWC PHD	2.520	5.498	10/03	2.641	10/04	2.792	10/05	2.670	10/06	CONT.	CONT.	
FRP	WR/RC	NSWC DD	2.748			2.772		1.592		1.343		CONT.	CONT.	
FRP	WR/RC/PD	VARIOUS	1.380	1.737	10/03	1.666	10/04	0.000	10/05	0.000	10/06	CONT.	CONT.	
JDEP	WR/RC	NSWC DD	4.400	3.200	10/03	3.331	10/04	3.295	10/05	3.280	10/06	CONT.	CONT.	
JDEP	WR/RC	VARIOUS	0.700	1.503	10/03	1.545	10/04	1.665	10/05	1.670	10/06	CONT.	CONT.	
Navy Open Architecture	VARIOUS	VARIOUS	0.000	0.000		0.000		8.500	10/05	0.000		CONT.	CONT.	
REAGAN SG	WR/RC	VARIOUS	0.000	5.004	09/04									
REAGAN SG	VARIOUS	VARIOUS	0.000	1.377	09/04									
DEP Engineering and Operations	WR/RC	NSWC DD	10.325	7.909	10/03	8.909	10/04	6.111	10/05	6.229	10/06	CONT.	CONT.	
DEP Engineering and Operations	WR/RC/PD	VARIOUS	1.395	2.325	10/03	1.657	10/04	0.000	10/05	0.000	10/06	CONT.	CONT.	
Strike Force Interoperability Cert	WR/RC	NSWC DD	1.686	5.707	10/03	2.350	10/04	11.096	10/05	6.985	10/06	CONT.	CONT.	
Strike Force Interoperability Cert	WR/RC/PD	VARIOUS	1.513	3.804	10/03	1.999	10/04	0.000	10/05	0.000	10/06	CONT.	CONT.	
Interoperability Fixes	WR/RC	NSWC DD	N/A	8.449	10/03	0.795	10/04	1.500	10/05	0.000	10/06	CONT.	CONT.	
Interoperability Fixes	WR/RC	VARIOUS	N/A	0.000		0.000		0.000		0.000		CONT.	CONT.	
Interoperability Fixes	WR/RC	NSWC DD-CDSA DI	N/A	1.000	10/03	0.500	10/04	0.000	10/05	0.000	10/06	CONT.	CONT.	
Interoperability Fixes	WR/RC	NSWC DD	N/A	1.250	10/03	0.500	10/04		10/05	0.000	10/06	CONT.	CONT.	
CNI/OA Transformation Roadmap	WR/RC	NSWC DD	0.000	0.000		4.000	10/04					CONT.	CONT.	
CNI/OA Transformation Roadmap	VARIOUS	VARIOUS	15.230	24.221	11/03	21.000	11/04	25.732	11/05	27.545	11/06	CONT.	CONT.	
Contract Engineering Support	VARIOUS	VARIOUS	5.119	3.311	11/03	5.327	11/04	2.567	11/05	2.995	11/06	CONT.	CONT.	
Contract Program Mgt Support	VARIOUS	VARIOUS	1.109	1.167	11/03	1.100	11/04	1.100	11/05	1.100	11/06	CONT.	CONT.	
Single Integrated Air Picture	VARIOUS	VARIOUS	0.000	1.662	12/03	0.000				0.000		CONT.	CONT.	
HEL Activities	VARIOUS	VARIOUS	1.567	4.380	03/04	5.057	03/05			0.000		CONT.	CONT.	
HEL Contracts	VARIOUS	VARIOUS	1.674	7.688	03/04	19.227	03/05			0.000		CONT.	CONT.	
CARUSO	WR/RC	VARIOUS	0.000	0.000		2.476	10/04							
USMC	VARIOUS	VARIOUS	0.489	0.000		0.000				0.000		CONT.	CONT.	
Travel		NAVSEA TRAVEL	0.200	0.250	09/04	0.250	09/05	0.250	09/06	0.250	09/07	CONT.	CONT.	
												CONT.	CONT.	
Subtotal Product Development			63.904	102.456		99.099		76.975		65.436		CONT.	CONT.	

Remarks:

Exhibit R-4a, Schedule Detail				DATE: **February 2005**					
APPROPRIATION/BUDGET ACTIVITY **RDT&E,N/BA-4**				PROJECT NUMBER AND NAME 0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI					
Schedule Profile		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	FY2010	FY2011
	ABRAHAM LINCOLN FIT	2/3Q							
	GEORGE WASHINGTON FIT	4Q							
	HARRY S. TRUMAN FIT	2/3Q							
	NIMITZ FIT	3Q							
	THEODORE ROOSEVELT FIT	4Q							
	ENTERPRISE FIT	4Q							
	SEE 05-01		1Q						
	SEE 05-02		1Q						
	SEE 05-03		2Q						
	SEE 05-04		3Q						
	SEE 05-05		3Q						
	SEE 05-06		4Q						
	LHA 1/5 PIT		4Q	1Q					
	FFG 7 PIT	1Q/2Q/3Q							
	CVN 76 PIT	1/2/3/4Q	1Q/2Q		1Q/2Q				
	LSD 41/49 PIT	2Q/3Q	3Q/4Q						
	LPD 17 PIT	3Q	1Q/3Q	2Q/3Q					
	FFG 7 LEVEL 13 PIT	1Q/2Q							
	FFG 7 LEVEL 12 PIT	2Q/3Q	2Q/3Q						
	LHD 2/4/5 PIT	2Q/3Q		3Q/4Q					
	SSDS MK2 MOD1 PIT(CVN 68)	3Q/4Q	1Q						
	LHA 4 PIT		2Q/3Q	1Q/2Q					
	CVN 74 PIT		1/2/3/4Q						
	CV67 PIT		4Q						
	CV63, CVN 65/73 PIT	3Q/4Q							
	CVN 71/72 PIT			2Q/3Q					
	SSDS MK2 MOD 1 PIT (CVN 69)		1Q/2Q/3Q						
	LHD 7 PIT	1Q		4Q					
	LHD 3/6 PIT		3Q/4Q						
	CVN 75 SSDS MK2 MOD 1A PIT		4Q	1Q					
	CVN 70 PIT	3Q							
	CVN 68 PIT	3Q		1Q/2Q					
	CVN 77 PIT				1-4Q	1-3Q			
	LHD 8 PIT			3Q/4Q	4Q	1Q/2Q			
	NAVY JOINT TEST	1Q/4Q	4Q						

EXHIBIT R4, Schedule Profile

DATE: **February 2005**

APPROPRIATION/BUDGET ACTIVITY
RDT&E,N/BA-4

PROJECT NUMBER AND NAME
0164/9356/9357/9527/9529/9530/9531/9532 CSI/SFI

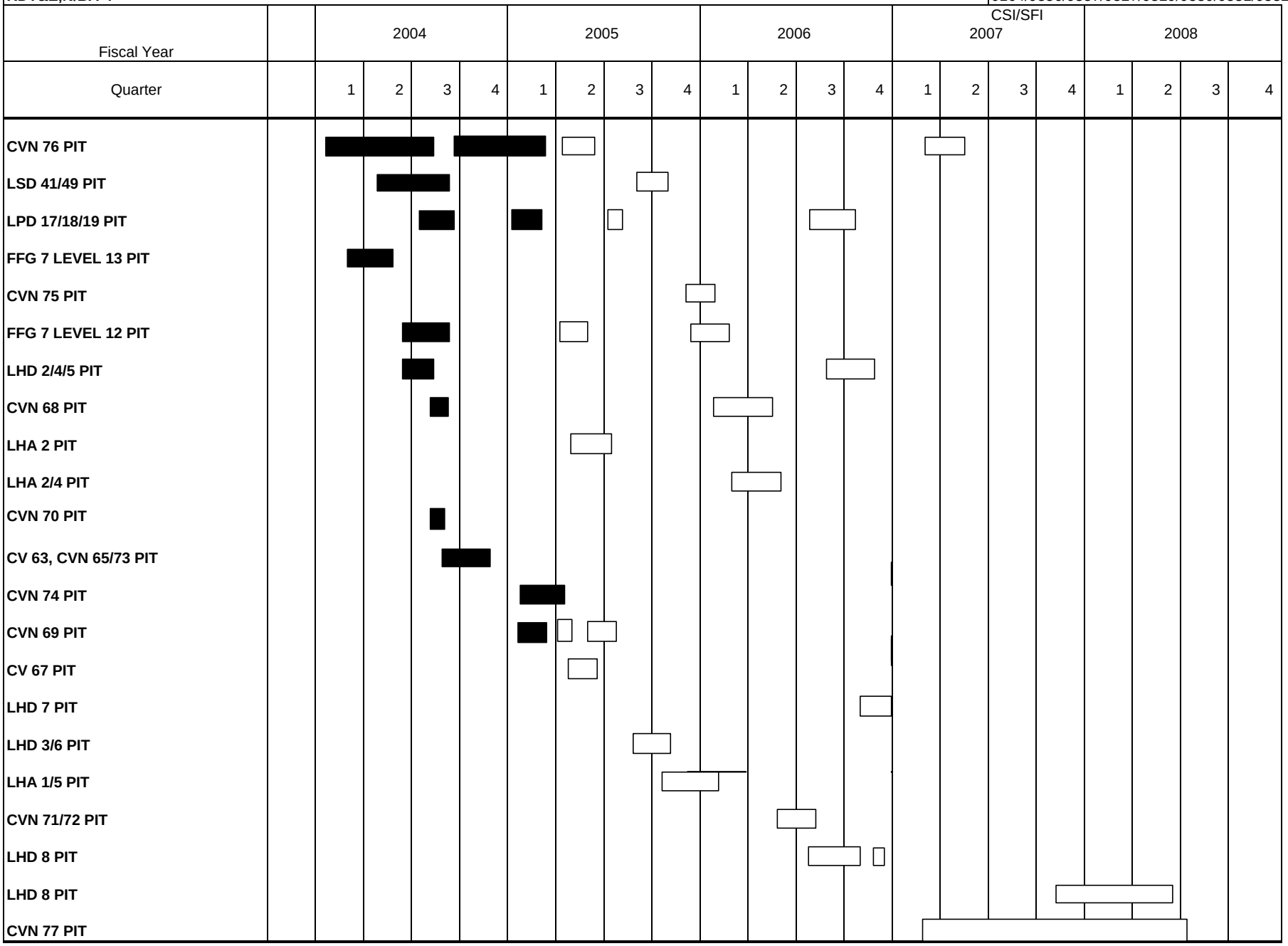

EXHIBIT R4, Schedule Profile																DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E,N/BA-4**						PROGRAM ELEMENT NUMBER AND NAME 0603582N SFI										PROJECT NUMBER AND NAME 0164/9356/9357/9527/9529/9530 9531/9532 CSI/SFI
Fiscal Year		2004				2005				2006				2007		
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FIT 04-01		▲															
ISET 04-01		▲															
FIT 04-02			▲														
ISET 04-02			▲														
FIT 04-03					▲												
ISET 04-03					▲												
REAGAN CST-2			▲														
REAGAN CST-3					▲												
IFC EVENT		▲															
DEP TCN EVENT					▲												
FY04 VV&A				▲	▲												
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													△				
SEE 06-05													△				
SEE 06-06														△			
IA 06-04														△			
DEP VV&A														△			

R-1 SHOPPING LIST - Item No. 54

NOTE 1: 6 SEEs and 2 Ias are scheduled for FY07