EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5**						R-1 ITEM NOMENCLATURE 0604231N - TACTICAL COMMAND SYSTEM			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Total PE Cost		**68.220**	**65.443**	**49.180**	**56.100**	**57.557**	**60.278**	**63.303**	
2213 MISSION PLANNING		**23.939**	**25.018**	**10.973**	**10.310**	**9.596**	**9.967**	**10.629**	
9123 FORCENET		**12.298**	**7.759**	**15.630**	**17.095**	**19.034**	**21.008**	**22.987**	
0486 GCCS-M TACMOBILE		**1.378**	**1.297**	**1.216**	**1.259**	**1.489**	**1.517**	**1.548**	
0521 GCCS-M INTELLIGENCE APPLICATIONS		**3.048**	**2.567**	**2.967**	**3.295**	**3.978**	**4.058**	**4.140**	
0709 GCCS-M MARITIME APPLICATIONS		**6.282**	**7.364**	**6.046**	**7.907**	**8.530**	**8.702**	**8.878**	
2009 TRUSTED INFORMATION SYSTEMS		**2.876**	**2.122**	**1.482**	**2.137**	**1.828**	**1.654**	**1.479**	
2305 GCCS-M COMMON APPLICATIONS		**12.283**	**10.810**	**9.110**	**12.809**	**11.689**	**11.925**	**12.169**	
2306 NAVAL SIMULATION SYSTEM		**0.008**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
2307 INTEGRATED SHIPBOARD NETWORK SYSTEM		**1.503**	**1.026**	**1.685**	**1.241**	**1.366**	**1.393**	**1.421**	
3032 NTCSS ENTERPRISE DATABASE AND MLDN		**4.605**	**3.277**	**0.071**	**0.047**	**0.047**	**0.054**	**0.052**	
9372 3D COMMON OPERATIONAL PICTURE		**0.000**	**1.682**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	
9373 AN/UYQ-70 BASED IT-21 C4SIR UPGRADES		**0.000**	**2.521**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	

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

The Tactical Command System (TCS) upgrades the Navy's Command, Control, Computer and Intelligence (C3I) systems and processes C3I information for all warfare mission areas including planning, direction and reconstruction of missions for peacetime, wartime and times of crises. A major component of the TCS is the Global Command and Control System - Maritime (GCCS-M). GCCS-M is the Navy's fielded Command and Control system, a key component of the Copernicus ... Forward C4I strategy, and is the Navy's tactical implementation of the Global Command and Control System (GCCS). GCCS-M has aggressively pursued an evolutionary acquisition strategy in rapidly developing and fielding new C4I capabilities for GCCS-M Afloat, GCCS-M Ashore, GCCS-M Tactical/Mobile and TIS users. GCCS-M current phase includes continued usage of the Defense Information Infrastructure Common Operating Environment (DII COE), as stipulated by the Joint Technical Architecture, incorporation of Fleet requirements for merging tactical and non-tactical networks, and application of mature Web and Personal Computer (PC) technologies to provide required information/capabilities. This phase will provide, in the short term, deployment of an integrated UNIX/PC/COTS based Naval implementation of GCCS-M which will provide the warfighter with a cost-effective, user-friendly, comprehensive C4I solution and, in the long-term, a continuous, integrated Command and Control link from sensor to shooter, including full-range real-time or near-real-time information to weapon systems for decision makers. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program. The Naval Simulation System (NSS) provides a capability to simulate the execution of all Naval Warfare including Operations Other Than War to be used for a number of related purposes. Fleet Command Centers use this capability for Course of Action Assessment. NSS is a multi-warfare, object oriented, Monte Carlo simulation system. NSS provides the Fleet a capability to evaluate alternate Courses of Action (COA) and C4ISR architectures and supports the Joint Forces Air Component Commander (JFACC) process by optimizing target/weapon solutions. NSS also injects simulated platform, system and commander level entities into real world C4ISR systems. NSS simulated each Warfare Area Commander's perceived tactical picture and performs Measures of Effectiveness against ground truth. Currently there are over 40 government and private industry sites using NSS. NSS has been made part of many HLA Federations and is also DII COE Level 7 Compliant. **(CONTINUED ON NEXT PAGE)**

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5**	R-1 ITEM NOMENCLATURE 0604231N - TACTICAL COMMAND SYSTEM

(CONTINUED FROM PREVIOUS PAGE)

The Integrated Shipboard Network System (ISNS) program provides every Navy ship, including submarines, with a reliable, high-speed Local Area Network (LAN) that will provide LAN and Wide Area Network (WAN) access to the DISN WAN (Secure and Nonsecure Internet Protocol Router Network -SIPRNet and NIPRNet). It provides real-time information exchange between afloat units, Component Commanders, numbered Fleet Commanders and Fleet CINCs through the migration of existing legacy systems into the IT-21 strategy and is a key factor in the implementation of the Navy's portion of Joint Vision 2010. Additionally, this RDT&E Project funding supports design, development and testing of two components of the Navy Tactical Command Support Systems (NTCSS) web initiative, NTCSS Enterprise Database and Maritime Logistics Data Network (MLDN). The development of a web-enabled enterprise database for NTCSS application will place all NTCSS databases into a similar structure, allowing greater interoperability between applications. MLDN will facilitate the movement of administrative workload from ships to shore. FORCEnet initiatives include the necessary Transformation Master Planning required across all management execution horizons (Near/Mid/Long-Term) to evolve towards a fully-netted human-centrically optimized combat force structure. FORCEnet efforts will serve as the transformational change agent for the integration of all Navy and Marine Corps mission capabilities, system and human-centric architectures coupled with enabling technologies grounded in a business-based program order-of-buy approach combined with the technical program management/execution responsibilities leading Navy and Marine Corps transformational capabilities towards a fully netted combat force. FORCEnet is the architecture and building blocks of sensors, networks, decision aids, weapons, warriors and supporting systems integrated into a highly adaptive, human-centric, comprehensive system that operates from seabed to space, from sea to land. The goal of the NavMPS Program Team is to develop scaleable, extensible, and configurable planning systems to meet a full range of automated mission planning needs. NavMPS products (includes the Joint Mission Planning System (JMPS)) provides the information, automated tools, and decision aids needed to rapidly plan aircraft, weapon, or sensor missions and post-mission analysis of recorded data. JMPS is a co-development effort between the USN, USAF, USA, and SOCOM under the Multi-Service Joint Enterprise Management Team (JEMT). Requirements are identified and capabilities are developed in an evolutionary concept in order to address world situation requirements for mission planning and precision guided missile deployment.

FY04 includes Congressional Adds for 3D Common Operational Picture (COP) $1.7M and AN/UYQ-70 Based IT-21 C4ISR upgrades $2.5M.

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2213 Mission Planning			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**23.939**	**25.018**	**10.973**	**10.310**	**9.596**	**9.967**	**10.629**
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Joint Mission Planning System (JMPS) is a co-development program with the Navy, Air Force, United States Special Operations Command (USSOCOM), and Army to develop a scaleable, extensible, and configurable open architecture to meet a full range of Joint automated planning needs. The JMPS mission planning system will provide the information, automated tools, and decision aids needed to rapidly plan for aircraft, weapon, or sensor missions as well as post-mission analysis of recorded data. JMPS will be a Defense Information Infrastructure/Common Operating Environment (DII/COE) complaint mission planning system, which will meet future DOD requirements for interoperability within and across DOD C4I systems while reducing life-cycle cost. As a key net-centric warfare enabler, JMPS will provide seamless interoperability, improved data availability and flexibility. JMPS accomplishes these goals by establishing a standardized environment for mission planning systems (the Joint Mission Planning Environment (JMPE) that provides a DII COE/Joint Technical Architecture (JTA) compliant Windows 2000 core, a mission planning infrastructure of basic databases, management tools, and framework services, and set a common mission planning components. A JMPS mission planning system is a combination of the JMPE together with platform/Service unique components and the necessary system hardware to meet user mission planning needs and constraints. The Navy and Air Force will co-develop the common software, while individual platforms programs will develop platform specific functionality, similar to what is being done in both Tactical Automated Mission Planning System (TAMPS) and Air Force Mission Support System (AFMSS) programs. JMPS has adopted an evolutionary acquisition approach which will allow the warfighter to seamlessly perform basic-level flight planning with the JMPS Version 1 system, unit-level mission/combat planning with the JMPS Combat 1 system, and multi-unit/strike planning and force-level decision aids with the JMPS Follow-On Components system. The JMPS Version 1 system will provide basic flight planning, route planning/editing, file calculations, mapping, 3-D visualization, Common Mission Data Load (CMDL), and Intel interface. The JMPS Combat 1system is planned to be an enhanced version of JMPS Version 1 and will replace TAMPS in the fleet. JMPS Combat 1 will provide unit level planning, Precision Targeting Workstation (PTW) Imagery Interface, Global Command and Control System-Maritime (GCCS-M) interface, GPS Crypto Keys, Program Guided Munitions (PGM) planning, weather interface, Global Positions Systems (GPS), Prediction, Server Implementation. The JMPS Combat One will also serve as a common foundation to support mission planning for all legacy platforms. JMPS will evolve architecturally as necessary to support future platforms and weapons such as the Joint Strike Fighter (JSF) and Joint Air to Surface Standoff Missile (JASSM) . The JMPS Follow-On Components system will be an enhanced version of JMPS Combat 1 to provide additional components and capabilities including a multi-unit level mission planning capability, Theater Ballistics Missile Command System (TBMCS) interface, route deconfliction, stores planning and weapon effectiveness, and Littoral Mission Planning Tools.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	2213 Mission Planning

B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		18.322	13.401	0.000
RDT&E Articles Quantity				

JMPS Version 1 and Combat 1 Development Effort- JMPS Version 1 and Combat 1 support during D/T & O/T. Nomination and assessment of JMPS Combat 1 contract incentive fees. Continue JMPS Combat 1 fix builds for any discrepancies identified during systems testing. Continue systems testing, start Unique Planning Component (UPC) testing, System of Systems testing, and Unique Planning Component (UPC) validations. Contract incentive fee. D/T Support--JMPS Combat 1 Pre-O/T Readiness Review and begin JMPS Combat 1 O/T late in FY03. Engineering Logistics & Management support. Provide collaboration support across platforms and weapons programs w/ Navy, Air Force, Army, and Marines.

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		5.069	10.712	10.073
RDT&E Articles Quantity				

JMPS Follow-On Components Effort--Start JMPS Follow-On development planning effort. Coordinate and plan the development of additional mission planning components and capabilities including a multi-unit level mission planning capability, TBMCS interface, route deconfliction, stores planning and weapon effectiveness. Operational Test support for JMPS Follow -On development planning effort. Coordinate and plan the development of additional mission planning components and capabilities including a multi-unit level mission planning capability, TBMCS Interface, route deconfliction, stores planning and weapon effectiveness. JMPS Follow-On support during Operational testing. Nomination and assessment of JMPS Follow-On contract incentive fees. Continue JMPS Combat 1 fix builds for any discrepancies identified during systems testing. Continue systems testing, start UPC testing, System of Systems testing, and UPC validations. Develop Betas & Version Releases for Framework components & enhanced operability. Transition S&T (Science and Technology) initiatives into JMPS Follow-On.

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.548	0.905	0.900
RDT&E Articles Quantity				

PFPS Component Migration to JMPS--Continue component development encompassed functionality, full documentation, User help-online support, component installation, developer and/or user training/CBT, and maintenance. PFPS Component Migration to JMPS Follow-On.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical command System	2213 Mission Planning

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	24.099	25.300	18.759
Current BES/President's Budget	23.939	25.018	10.973
Total Adjustments	-0.160	-0.282	-7.786
Summary of Adjustments			
SBIR/STTR Transfer	-0.031		
Reprogrammings	-0.129		
Congressional Undistributed Reductions		-0.215	
Reprioritization		-0.067	-7.749
Economic Assumptions			-0.037
Reprioritization			
	-0.160	-0.282	-7.786

Schedule: Acquisition Milestones from PB04

JC-1 program identified an IBR in 2Q & 4Q FY03. The 2nd Qtr was not required and was inadvertently added.
H2E OTRR changed to JC-1 OTRR. H2E was a mistake, should always have read JC-1 OTRR.
UPC Validation moved from 4Q FY03 & 4Q FY04 to 1Q & 4Q FY04 due to change in delivery schedule of products from the UPC platforms and programs.

Test & Evaluation Milestones

UPC Integration and Validation was changed to meet the delivery schedules of products from the UPC platforms and programs.
PresBud 04 identified BETA test and this budget shows FQT - Beta test is complete and the program has now moved into Formal Qualification Testing (FQT).

Production Milestones

JMPS IOC slid 1 month from 4Q FY04 to 1Q FY05 due to carrier deployment shift arrangement. The original plan was to IOC on the Nimitz but due to Fleet Readiness Plan (FRP) IOC will now take place on the Lincoln.

Technical: Not applicable

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System	PROJECT NUMBER AND NAME 2213 Mission Planning

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
BLI 287600 TAC A/C Mission Planning System (OPN)	6.807	8.551	9.098	7.525	8.113	8.241	8.578	Continuing	Continuing
Related RDT&E:									
PE 0208006F Air Force Mission Support System (Total)	16.540	62.348	144.059	144.544	247.154	98.609	96.164	Continuing	Continuing

(U) E. ACQUISITION STRATEGY:

The JMPS Acquisition strategy will evolve as the program matures but initially will cover the Engineering and Manufacturing Development (EMD) effort. The strategy entails a two-phased evolutionary approach to acquire the initial JMPS development effort. The combined USAF/USN Phase I of this effort obtained various technical studies, segment architect concept, design to cost estimate, and an architecture development statement of work. Phase I was added to the program to determine reduced cost strategies through software reuse from both USN TAMPS and USAF AFMSS programs. Additionally, this phase provided a risk reduction plan for the most effective migration of existing mission planning systems, Phase I was awarded to two contractors. In Phase II, one contractor was selected to develop the JMPS architecture work and version 1 mission planning components. Post version I component development will be broken into two phases. Components required to retire TAMPS and meet F-16 planning requirements will be developed under a modification to the existing architecture framework contract. All other combat and force level components will be acquired through a follow-on full and open competition.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2213 Mission Planning						
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 Software Dev JV-1	SS/CPIF	NGIT, VA	29.655	3.022	11/02						32.677	32.677
Primary Software Dev JC-1	SS/CPIF	NGIT, VA	11.400	10.021	11/02	2.730	11/03				24.151	24.151
Primary Software Dev N-PFPS	MP	Eglin AFB. Florida	6.315	1.090	11/02	0.500	11/03	0.500	11/04		8.405	
Primary Software N-PFPS	MP	Hill AFB, Utah	1.212	0.000	11/02	0.210	11/03	0.200	11/04		1.622	
Primary Software Dev Follow-on	MP	Hascom, MA		3.050	11/02	10.201	11/03	3.693	11/04		16.944	
Systems Engineering	MP	FEDISM (GSA)	0.200	0.200	11/02	0.200	11/03			Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees			4.395			2.310	11/03				6.705	6.705
Subtotal Product Development			53.177	17.383		16.151		4.393		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support	WX	SPAWAR, Phil. PA	1.116	0.973	11/02	1.773	11/03	1.506	11/04	Continuing	Continuing	
Integrated Logistics Support	WX	NAWCAD, Pax River, MD	0.679	0.699	11/02	1.200	11/03	1.300	11/04	Continuing	Continuing	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			1.795	1.672		2.973		2.806		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2213 Mission Planning						
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	SPAWAR, Phil, PA		0.859	11/02						0.859	
Operational Test & Evaluation	WX	OPTEVFOR, VA	0.272	0.000	11/02	0.384	11/03			Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.272	0.859		0.384		0.000		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support	WX	NAWCAD, Pax River, MD	1.016	0.975	11/02	1.820	11/03	1.006	11/04	Continuing	Continuing	
Program Management Support	RX	Various	1.370	0.300	11/02	0.770	11/03	0.556	11/04	Continuing	Continuing	
Travel	WX	NAWCAD, Pax River, MD	0.480	0.150	11/02	0.190	11/03	0.200	11/04	Continuing	Continuing	
Transportation											0.000	
Government Engineering Support		NAWCWD, Pt Mugu, CA	3.375	2.600	11/02	2.730	11/03	2.012	11/04	Continuing	Continuing	
Subtotal Management			6.241	4.025		5.510		3.774		Continuing	Continuing	
Remarks:												
Total Cost			61.485	23.939		25.018		10.973		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-5**

PROGRAM ELEMENT NUMBER AND NAME: 0604231N Tactical Command System

PROJECT NUMBER AND NAME: 2213 Naval Mission Planning

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	1	2	3	4
Acquisition Milestones																																
JC-1 PROGRAM IBR ITCRR			▲					▲																								
UPC RR									△																							
JC1 OTRR										△																						
UPC VALIDATION Delivery										▭																						
Software Software Delivery PFPS Version 3.3 PFPS Version 4.0 PFPS Version 4.1 JC1 0.1 Delivery JC1 0.2 Delivery				▬ ▬ ▲			▲			▭																						
Test & Evaluation Milestones																																
JMPS Framework				JC1 0.1 BUILD ▬			JC1 0.2 BUILD ▬																									
PQT1 PQT2 FQT							▲	▲ ▲																								
System Test									▭																							
UPC Integration/Validation									▭																							
Production Milestons																																
JMPS IOC													△																			
Deliveries																																

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2004**		
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-5**	PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2213 Naval Mission Planning			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Acquisition Milestones								
JC1 Program IBR/ITCRR	3Q	4Q						
UPC RR			1Q					
JC1 OTRR			2Q					
UPC Validation Delivery			1Q-2Q					
Software Delivery								
PFPS Version 3.3	4Q	1Q						
PFPS Version 4.0	4Q	1Q-2Q						
PFPS Version 4.1		4Q	1Q-2Q					
JC1 0.1 Delivery	4Q							
JC1 0.2 Delivery		3Q						
Test & Evaluation Milestones								
JMPS Framework								
JC1 0.1 Build	4Q	1Q-2Q						
JC1 0.2 Build		2Q-4Q						
PQT1 & PQT2		3Q-4Q						
FQT		4Q						
System Test		4Q	1Q-2Q					
UPC Integration/Validation		4Q	1Q-2Q					
Production Milestones								
JMPS IOC				1Q				

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM					PROJECT NUMBER AND NAME 0486 GCCS-M TACMOBILE					
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Total Program
Project Cost	**65.281**	**1.378**	**1.297**	**1.216**	**1.259**	**1.489**	**1.517**	**1.548**		**Continuing**	**Continuing**
RDT&E Articles Qty											**0**

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

The Global Command and Control System-Maritime (GCCS-M) Tactical/Mobile program provides evolutionary systems and equipment upgrades to support Maritime Sector Commanders with the capability to plan, direct and Control the tactical operations of Joint and Naval Expeditionary Forces and other assigned units within their respective area of responsibility. These operations include littoral, open ocean, and over land all-sensor surveillance, anti-surface warfare, over-the-horizon targeting, counter-drug operations, power projection, antisubmarine warfare, mining, search and rescue, and special operations.

The missions are supported by the Tactical Support Centers (TSCs) and the Mobile Operations Control Centers (MOCCs). Services provided include analysis and correlation of diverse sensor information; data management support; command decision aids; rapid data communication; mission planning and evaluation and dissemination of surveillance data and threat alerts to operational users ashore and afloat. All Tactical/Mobile systems are based on the GCCS-M architecture, which is Defense Information Infrastructure (DII) Common Operating Environment (COE) compliant.

TSCs provide C4I capability, air-ground, satellite and point-to-point communications systems; sensor analysis capabilities; avionics and weapons system interfaces and facilities equipment. MOCC is a scalable and mobile version of the TSC for operations from airfields that do not have TSC support. This program assures that existing TSCs and MOCCs are modernized to fulfill their operational requirements. TSC/MOCC will continue to support P-3C/S-3B aircraft updates to sensors and weapons systems, such as the Anti-Surface Warfare Improvement Program (AIP), as well as develop emergent, ground support capabilities for the Multi-Mission Aircraft (MMA) and Broad Area Maritime Unmanned Aerial Vehicle BAMS UAV).

GCCS-M Tac/Mobile R&D efforts are developed in agreement with and in mutual support of OPNAV N62 and N78. These efforts are required to provide support for the N78 platforms as related to the non-C2 aspects of the program. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	0486 GCCS-M TACMOBILE	

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.330	0.227	0.199	
RDT&E Articles Quantity				

Develop interface documentation based on joint and coalition SATCOM and line of site radios, cryptographic units and antenna technology. Ensure interoperability in a land, sea, air, and mobile environment. Investigate and initiate development of Digital Modular Radio (DMR) interface requirements between other TSC/MOCC elements. Design and test new interfaces between UHF SATCOM Digital Modular Radio (DMR) (as replacement for obsolete VICS radio) and legacy system. Continue development activities necessary to stay current with joint and coalition SATCOM and line of site radios, cryptographic units, antenna technology and the USN/DoD satellite replacement programs. Ensure interoperability in a land, sea, air and mobile environment. Conduct testing of air platform support systems and data exchange devices for incorporation into baseline systems for deployment.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.453	0.463	0.453	
RDT&E Articles Quantity				

Improve the acoustic Fast Time Analysis System (FTAS) to increase reliability of the obsolete proprietary hardware, by incorporating Commercial Off The Shelf (COTS) technology, and by incorporating new functionality in support of emerging aircraft acoustic replay capabilities. Develop a detailed set of requirements for follow-on system.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	0486 GCCS-M TACMOBILE

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.317	0.414	0.408	
RDT&E Articles Quantity				

Develop new capabilities to support emerging aircraft weapons and non-acoustic sensors on P-3C ASUW Improvement Program (AIP), P-3C Baseline Modification Upgrade Program (BMUP), and other derivative aircraft. Analyze Multi-mission Maritime Aircraft (MMA) aircraft specifications and concept documents for impact on TSC and MOCC systems. Develop ATOS interfaces for emerging aircraft data transport devices. Perform testing on new software and hardware components. Continue development of aircraft status to a web-enabled segment and combined with Aircraft Brief to form a single segment.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.278	0.193	0.156	
RDT&E Articles Quantity				

Analyze TSC/MOCC requirements for advanced data links such as LINK-16, Common Data Link (CDL) and other high bandwidth data transmission paths. Migrate two-way LINK-11 to new platform. Develop new ground workstation software for new and upgraded aircraft sensors. Continue to develop interfaces for emerging aircraft data transport devices. Perform testing on new software and hardware components. Develop and document ground support systems and associated interfaces to support various data exchange devices for air platforms. Develop new ground workstation software for new and upgraded aircraft sensors. Continue to develop interfaces for emerging aircraft data transport devices. Perform testing on new software and hardware components.

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	0486 GCCS-M TACMOBILE

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget	1.437	1.317	1.229
FY05 President's Budget	1.378	1.297	1.216
Total Adjustments	-0.059	-0.020	-0.013
Summary of Adjustments			
FY2003 Update	-0.057		
Section 8094: Management Improvements		-0.003	
Sec. 8126: Efficiencies/Revised Econ. Assumptions		-0.011	
WCF - R&D - SPAWAR			-0.002
Rates - SSC			0.005
Inflation			-0.003
Non Purchase Inflation			-0.001
FY05 ITR RDTEN Balancing			-0.001
FY03 SBIR	-0.002		
SPAWAR Service Cost Center Adjustments		-0.006	-0.006
NWCF Rates - SPAWAR SSC Rates			-0.005
Subtotal	-0.059	-0.020	-0.013

(U) Schedule:

Previous versions of the GCCS-M 4.X development schedule were defined prior to designation of the OT platform. The USS Nimitz, CVN-68, was recently named as the OT platform (Ref: COMPACFLT PEARL HARBOR HI message R 261653Z AUG 03). Due to increased operations, ship availability schedules have been unstable. Based on the current, published ship availability schedule for the CVN-68, the OT process is now scheduled to begin in 4th Qtr FY04. There are no technical issues causing the schedule slip and there is no impact to future software development. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

(U) Technical:

N/A.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	0486 GCCS-M TACMOBILE

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
GCCS-M TACMOBILE (OPN - BLI 2246)	5.060	9.422	5.100	5.309	5.314	5.427	5.543	Continuing	Continuing

(U) E. ACQUISITION STRATEGY:

N/A

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 0486 GCCS-M TACMOBILE						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	VARIOUS	VARIOUS	18.729	0.221	VARIOUS	0.378	VARIOUS	0.338	VARIOUS	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			18.729	0.221		0.378		0.338		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	33.255	0.785	VARIOUS	0.632	VARIOUS	0.618	VARIOUS	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			33.255	0.785		0.632		0.618		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM				PROJECT NUMBER AND NAME 0486 GCCS-M TACMOBILE						
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											0.000	
Operational Test & Evaluation	WR	OPTEVFOR	3.084	0.070	VARIOUS	0.071	VARIOUS	0.060	VARIOUS	Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			3.084	0.070		0.071		0.060		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	VARIOUS	VARIOUS	10.213	0.302	VARIOUS	0.216	VARIOUS	0.200	VARIOUS	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			10.213	0.302		0.216		0.200		Continuing	Continuing	
Remarks:												
Total Cost			65.281	1.378		1.297		1.216		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R4, Schedule Profile — DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-5**

PROGRAM ELEMENT NUMBER AND NAME: 0604231N - TACTICAL COMMAND SYSTEM

PROJECT NUMBER AND NAME: 0486 GCCS-M TACMOBILE

Fiscal Year	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										GCCS-M 4.X MS C ▲						GCCS-M 4.1 (JC2 Migration Bld) MS C ▲								JC2 / 5.X MS C ▲				
Prototype Phase																												
Development																												
Delivery																												
Software Deliveries					GCCS-M Ver 4.X DELIVERY ▲								GCCS-M 4.1 (JC2 Migration Build) ▲									JC2 / 5.X ▲							
Test & Evaluation Milestones																												
Development Test								GCCS-M Ver 4.X OT ▲								GCCS-M 4.1 (JC2 Migration Build) OT ▲								JC2 / 5.X OT ▲				
Operational Test																												
Production Milestones																												
Deliveries																												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-5**	PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM				PROJECT NUMBER AND NAME 0486 GCCS-M TACMOBILE			
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Software Delivery - GCCS-M 4.X			Q2					
Operational Test GCCS-M 4.X			Q2					
Milestone C GCCS-M 4.X				Q2				
Software Delivery GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q2			
Operational Test GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q3			
Milestone C GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q4			
Software Delivery JC2/ 5.X							Q2	
Operational Test JC2/ 5.X							Q3	
Milestone C JC2/5.X							Q4	

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM					PROJECT NUMBER AND NAME 0521 GCCS-M INTELLIGENCE APPLICATIONS					
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Total Program
Project Cost	**44.336**	**3.048**	**2.567**	**2.967**	**3.295**	**3.978**	**4.058**	**4.140**		**Continuing**	**Continuing**
RDT&E Articles Qty											

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

GCCS-M Intelligence Applications are an integrated set of Defense Information Infrastructure Common Operating Environment (DII COE) compliant segments designed to support tactical intelligence processing and reside on the Intelligence Shared Data Server (ISDS). The ISDS is the central database server for GCCS-M Afloat, the Command and Control Warfare Commander (C2WC) and tactical mission planning systems. Development of GCCS-M Intelligence applications for this data distribution includes dynamic updates of Naval Intelligence Database (NID) and military integration with digital map and imagery systems. The current GCCS-M Intel Apps effort includes providing intelligence data distribution to multiple shipboard warfighters via an analog video distribution system. Furthermore, the GCCS-M Intel Apps effort will enable the GCCS-M Afloat architecture to meet downgrading and releasability requirements. GCCS-M imagery applications provide for archiving, viewing and mensuration of still and video images. This effort is also continuing the transition to Commercial Off The Shelf (COTS) hardware and software as part of the current GCCS-M initiative to capitalize on the latest Web/PC industry/commercial technology. The GCCS-M Intel Apps effort is part of the Tactical Intelligence and Related Activities (TIARA) program, managed by the Secretary of Defense through the Assistant Secretary of Defense for C4I. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	0521 GCCS-M INTELLIGENCE APPLICATIONS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.000	0.765	0.850	
RDT&E Articles Quantity				

FY04 - C2 FIRES Integration: Develop and improve capability of Intel and Imagery targeting systems. Integrate Joint Targeting Toolbox (JTT) products into GCCS-M. Integrate SCI SIGINT support to GENSER Command and Control capabilities in support of time critical targeting.

FY05 - C2/Intelligence, Surveillance and Reconnaissance (ISR) Integration: Provide a standard set of integrated, linked, tools and services that access existing National, Theater, Service, and Coalition imagery and intelligence resources.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.189	0.000	0.000	
RDT&E Articles Quantity				

FY03 - Targeting / Land Track: Integrated Joint Targeting Toolbox (JTT) products into GCCS-M. Provided a single set of interfaces within JTT for creation of target lists, selection of imagery, creation of task collection, plans, etc. Integrated SCI SIGINT support to GENSER Command and Control capabilities in support of time critical targeting.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.189	0.175	0.000	
RDT&E Articles Quantity				

FY03 - Spectral and Environmental Analysis: Developed and enhanced Intel data sources for C2WC, nodal analysis, and other GCCS-M applications.

FY04 - Spectral and Environmental Analysis: Continue to develop and enhance evolving Intel data sources for C2WC, nodal analysis, and other GCCS-M applications.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	0521 GCCS-M INTELLIGENCE APPLICATIONS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	1.010	0.593	0.661	
RDT&E Articles Quantity				

FY03 - Imagery / Video Processing: Continued migration of imagery applications that support the Integrated Imagery and Intelligence (I3) product line to the Windows 2000 platform. Integrated capability to support UAV data visualization and analysis.

FY04 - Imagery / Video Processing: Develop software to implement fleet requirements for integrating order of battle maintenance, imagery analysis, and intelligence support to the Common Operational Picture (COP) into commercial COTS environments to facilitate easy integration with IT-21 platforms and products. Develop interfaces to other imagery archives.

FY05 - Imagery Exploitation. Provide the capability to access and perform manual and automated correlation of national, organically collected, and other imagery and full motion imagery with multiple, dissimilar sources.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	1.660	1.034	1.456	
RDT&E Articles Quantity				

FY03 - Threat OOB and C&P: Met fleet requirements for integrating Order of Battle maintenance, and intelligence support to the COP. Provided data fills for the Intel database. Implemented and enhanced a fully functional Military Intelligence Data Base (MIDB) interface mechanism that enables GCCS-M intelligence applications, combat systems, and mission planning systems to access data within the MIDB without having to change the software architecture with each MIDB release from the Defense Intelligence Agency (DIA).

FY04 - Threat OOB and C&P: Provide increased functionality in the Intelligence and Imagery applications to support capabilities in the DII COE, including real-time updates to mapping, communication, and track management tools. Integrate Intel data into the SCI enclave.

FY05 - Intelligence Data & Display. Provide the capability to develop, manage and disseminate the Order of Battle and weapons systems characteristics and performance parameters including integration of tactical and near real-time revisions to the Order of Battle. Provide the capability to perform manual and automated correlation of the Order of Battle, weapons systems characteristics and performance parameters with multiple, dissimilar sources.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	0521 GCCS-M INTELLIGENCE APPLICATIONS

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget:	3.033	2.601	2.986
FY05 President's Budget:	3.048	2.567	2.967
Total Adjustments	0.015	-0.034	-0.019
Summary of Adjustments			
FY 2003 Update	0.015		
Section 8094: Management Improvements		-0.007	
Section 8126: Efficiencies /Revised Econ Assumptions		-0.022	
WCF - R&D - SPAWAR -			-0.002
Rates - SSC			0.006
Inflation			-0.008
Non Purchase Inflation			-0.002
FY05 ITR RDTEN Balancing			-0.002
SPAWAR Service Cost Center Adjustments		-0.005	-0.006
NWCF Rates - SPAWAR SSC Rates			-0.005
Subtotal	0.015	-0.034	-0.019

(U) Schedule:

Previous versions of the GCCS-M 4.X development schedule were defined prior to designation of the OT platform. The USS Nimitz, CVN-68, was recently named as the OT platform (Ref: COMPACFLT PEARL HARBOR HI message R 261653Z AUG 03). Due to increased operations, ship availability schedules have been unstable. Based on the current, published ship availability schedule for the CVN-68, the OT process is now scheduled to begin in 4 th Qtr FY04. There are no technical issues causing the schedule slip and there is no impact to future software development. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

(U) Technical:

N/A.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	0521 GCCS-M INTELLIGENCE APPLICATIONS

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
GCCS-M (OPN - BLI 2608)	36.514	27.894	41.148	81.818	41.400	64.009	75.722	Continuing	Continuing

(U) E. ACQUISITION STRATEGY:

N/A

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 0521 GCCS-M INTELLIGENCE APPLICATIONS						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	VARIOUS	VARIOUS	18.268	0.378	VARIOUS	0.365	VARIOUS	0.381	VARIOUS	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			18.268	0.378		0.365		0.381		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	21.939	2.629	VARIOUS	2.167	VARIOUS	2.551	VARIOUS	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			21.939	2.629		2.167		2.551		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 0521 GCCS-M INTELLIGENCE APPLICATIONS						
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											0.000	
Operational Test & Evaluation	PD	OPTEVFOR	2.056	0.000		0.000		0.000		Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			2.056	0.000		0.000		0.000		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	VARIOUS	VARIOUS	2.073	0.041	VARIOUS	0.035	VARIOUS	0.035	VARIOUS	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			2.073	0.041		0.035		0.035		Continuing	Continuing	
Remarks:												
Total Cost			44.336	3.048		2.567		2.967		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-5**

PROGRAM ELEMENT NUMBER AND NAME: 0604231N - TACTICAL COMMAND SYSTEM

PROJECT NUMBER AND NAME: 0521 GCCS-M INTELLIGENCE APPLICATIONS

Fiscal Year	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										GCCS-M 4.X MS C					GCCS-M 4.1 (JC2 Migration Bld) MS C									JC2 / 5.X MS C						
Prototype Phase																												
Development																												
Delivery																												
Software Deliveries					GCCS-M Ver 4.X DELIVERY								GCCS-M 4.1 (JC2 Migration Build)									JC2 / 5.X						
Test & Evaluation Milestones																												
Development Test												GCCS-M Ver 4.X OT							GCCS-M 4.1 (JC2 Migration Build) OT						JC2 / 5.X OT						
Operational Test																												
Production Milestones																												
Deliveries																												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-5**	PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM				PROJECT NUMBER AND NAME 0521 GCCS-M INTELLIGENCE APPLICATIONS			
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Software Delivery - GCCS-M 4.X			Q2					
Operational Test GCCS-M 4.X			Q2					
Milestone C GCCS-M 4.X				Q2				
Software Delivery GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q2			
Operational Test GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q3			
Milestone C GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q4			
Software Delivery JC2/ 5.X							Q2	
Operational Test JC2/ 5.X							Q3	
Milestone C JC2/5.X							Q4	

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM					PROJECT NUMBER AND NAME 0709 GCCS-M MARITIME APPLICATIONS					
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Total Program
Project Cost	**61.400**	**6.282**	**7.364**	**6.046**	**7.907**	**8.530**	**8.702**	**8.878**		**Continuing**	**Continuing**
RDT&E Articles Qty											**0**

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

The GCCS-M system is the component of GCCS used in the afloat, ashore and tactical/mobile maritime environments. GCCS-M meets the requirements of the tactical commander for a near real-time, fused common tactical picture with integrated intelligence services and databases. GCCS-M supports the Command, Control, Communication, Computers and Intelligence (C4I) mission requirements of the Chief of Naval Operations (CNO), Fleet Commanders in Chief (CINC), Numbered Fleet Commanders (NFC), Officer in Tactical Command/Composite Warfare Commander (OTC/CWC), Type Commanders (TYCOM), Commander Submarine Operations Authority (COMSUBOPAUTH), Commander Task Force (CTF), Commander Amphibious Task Force (CATF), Commander Landing Force (CLF), Ship's Commanding Officer/Tactical Action Officer (CO/TAO), and Joint Task Force (JTF) Commanders, as well as other functional commanders such as the Command and Control Warfare Commander (C2WC). It also integrates both joint and service-unique Command and Control projects in order to support joint task force and Navy afloat requirements. Efforts include design, integration, and test of Tactical Decision Aids (TDAs), Navy Status of Forces (NSOF), and integration of GCCS-M baselines with weapons systems and Combat Direction Systems. These efforts will provide the battle group/force commanders with the information needed to enhance their warfighting capabilities. GCCS-M is also continuing a transition to Commercial Off The Shelf (COTS) hardware and software as part of the current GCCS-M initiative to capitalize on the latest Web/PC industry/commercial technology. GCCS-M is a key system currently being used to support real world operations afloat, ashore, and with tactical/mobile commanders. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

R-1 SHOPPING LIST - Item No. 91

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	0709 GCCS-M MARITIME APPLICATIONS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	3.879	3.459	3.435	
RDT&E Articles Quantity				

FY03 - Employment Scheduling / WSM / Readiness: Developed, updated, and implemented employment scheduling capabilities in support of Fleet requirements. Integrated WebSked (formerly known as VIPER) with latest versions of COTS/MS Office products. Incorporated WSM requirements identified by CRWG process. Continued to integrate evolving GCCS (Joint) segments into GCCS-M. Provided web-based, graphical entry of Readiness data and developed web-based solutions for viewing archived readiness data in Fleet-specified formats.

FY04 - Readiness/Scheduling/JPN/TADILS/BROADCASTS: Develop and incorporate web-based solutions to satisfy emerging readiness data viewing and archiving requirements identified and prioritized by Fleet users. Link readiness data with track, intelligence, imagery, and other data as required. Integrate GCCS (Joint) segments and other GCCS Family of System segments, as appropriate, with GCCS-M to ensure interoperability. Continue to incorporate WSM requirements as identified by the CRWG process. Develop, enhance, and integrate capabilities to distribute and associate non-track data with track data using mechanisms provided by the Common Operating Environment (COE) and Maritime extensions.

FY05 - Force Readiness/Mission Preparation/Maritime Execution Management/Undersea Warfare (UW): Facilitate access to and display of current ship readiness data including Aviation Maintenance Reports, CASREP and SORTSREP. Address the legislated requirement to access historical unit movement and status data. Provide the capability to report maritime readiness to the appropriate Joint Commander per the Joint Commander's instruction. Provide the capability to manage Maritime assets including deployment scheduling, pre-positioning and repositioning of units and stores, and allocation and reallocation of units to mission. Provide the capability to plan and manage the employment of undersea assets including water-space assignment, de-confliction and simultaneous monitoring of multiple undersea assets. Provide a bi-directional interface between the UW picture and the Common Operational Picture (COP) to facilitate Blue and Red force UW situational awareness.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.420	0.688	0.526	
RDT&E Articles Quantity				

FY03 - Spectral and Environmental Analysis: Developed capability for automatic interface and update with SPEDS/ICAP Integrated Product (SIIP) and Meteorological and Oceanography (METOC).

FY04 - Spectral and Environmental Analysis: Enhance existing spectral and environmental analysis functionality while developing and incorporating new functionality and capability in response to Fleet requirements. Develop and enhance automatic interface capabilities with METOC functionality as it evolves. Develop and integrate Tactical Decision Aids (TDAs) to support Electronic and Command and Control Warfare at the GENSER and SCI level.

FY05 - Electronic Warfare (EW): Provide EW analytical tools that can access, display and analyze inputs from relevant shipboard sensors. Manage and exploit the electromagnetic spectrum, including the development of electromagnetic exploitation plans using shipboard systems involved in operations against electromagnetic targets.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	0709 GCCS-M MARITIME APPLICATIONS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.284	2.085	1.552
RDT&E Articles Quantity			

FY03 - Aircraft Mission Planning / TACMOBILE: ProvidedC4I research and product improvement for P-3 mission and other avionics platforms. Provided enhanced capability in support of P-3 aircraft P3I and follow-on initiatives, including interface changes. Provided developmental support to P-3 Tactical Support Center operations by satisfying emerging technology requirements initiated by Fleet operators, developed interfaces to aircraft systems, and increased the interoperability between P-3 support applications and Command and Control systems.

FY04 - Aircraft Mission Planning / TACMOBILE: Provide capabilities to support Maritime Patrol Aircraft (MPA) operations; enhance and improve interfaces between Maritime Patrol Aircraft systems and mission support applications. Continue web enabling of mission support applications and migration of functionality to maintain COE currency.

FY05 - C2/Maritime Patrol Aircraft Ground Station Integration: Facilitate shared situational awareness by integrating information from maritime patrol aircraft sensors, emitters and real time event reporting networks into the COP. Provide a bi-directional interface between the Maritime Patrol Aircraft and the COP, as well as the capability to prepare aircrew briefings, show aircraft status and provide mission reconstruction.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.699	1.132	0.000
RDT&E Articles Quantity			

FY03 - Testing: Performed systems testing on integrated components of the Naval C4I architecture and proof of concept testing in exercise environments of emerging C4I technology.

FY04 - Testing: Conduct end-to-end system testing of components of the Naval C4I architecture in support of developmental, operational, and interoperability test evolutions. Support proof of concept testing of emerging C4I technologies in operational exercise environments.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.533
RDT&E Articles Quantity			

FY05 - Architecture: Mine Counter Measures (MCM) / Naval Coastal Warfare (NCW) Command and Control: Facilitate MCM situational awareness through integration with shipboard mine warfare counter measure systems. Provide a bi-directional interface between the MCM picture and the COP as well as support to the planning, evaluation, and asset management required for MCM operations. Facilitate scaled, shared situational awareness by integrating information from visual observation and other sources into the COP. Provide a bi-directional interface between the visual observation and other sources and the COP.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	0709 GCCS-M MARITIME APPLICATIONS

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget:	5.825	7.468	6.099
FY03 President's Budget:	6.282	7.364	6.046
Total Adjustments	0.457	-0.104	-0.053
Summary of Adjustments			
FY 2003 Update	0.492		
Section 8094: Management Improvements		-0.020	
Section 8126: Efficiencies /Revised Econ Assumptions		-0.063	
WCF - R&D - SPAWAR			-0.007
Rates - SSC			0.017
Inflation			-0.016
Non Purchase Inflation			-0.003
Miscellaneous Adjustment			-0.004
Issue FY03 SBIR	-0.035		
SPAWAR Service Cost Center Adjustments		-0.021	-0.018
NWCF Rates - SPAWAR SSC Rates			-0.015
Manpower			-0.007
Subtotal	0.457	-0.104	-0.053

(U) Schedule:

Previous versions of the GCCS-M 4.X development schedule were defined prior to designation of the OT platform. The USS Nimitz, CVN-68, was recently named as the OT platform (Ref: COMPACFLT PEARL HARBOR HI message R 261653Z AUG 03). Due to increased operations, ship availability schedules have been unstable. Based on the current, published ship availability schedule for the CVN-68, the OT process is now scheduled to begin in 4th Qtr FY04. There are no technical issues causing the schedule slip and there is no impact to future software development. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

(U) Technical:

N/A.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	0709 GCCS-M MARITIME APPLICATIONS

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
GCCS-M (OPN - BLI 2608)	36.514	27.894	41.148	81.818	41.400	64.009	75.722	Continuing	Continuing

(U) E. ACQUISITION STRATEGY:

N/A

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 0709 GCCS-M MARITIME APPLICATIONS						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	VARIOUS	VARIOUS	11.623	0.466	VARIOUS	0.673	VARIOUS	0.500	VARIOUS	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			11.623	0.466		0.673		0.500		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	40.301	5.360	VARIOUS	6.003	VARIOUS	5.044	VARIOUS	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			40.301	5.360		6.003		5.044		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 0709 GCCS-M MARITIME APPLICATIONS						
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											0.000	
Operational Test & Evaluation	WX	OPTEVFOR	1.090	0.000		0.000		0.000		Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			1.090	0.000		0.000		0.000		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	VARIOUS	VARIOUS	8.386	0.456	VARIOUS	0.688	VARIOUS	0.502	VARIOUS	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			8.386	0.456		0.688		0.502		Continuing	Continuing	
Remarks:												
Total Cost			61.400	6.282		7.364		6.046		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	0709 GCCS-M MARITIME APPLICATIONS

Fiscal Year	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										GCCS-M 4.X MS C ▲						GCCS-M 4.1 (JC2 Migration Bld) MS C ▲							JC2 / 5.X MS C ▲						
Prototype Phase																												
Development																												
Delivery																												
Software Deliveries									GCCS-M Ver 4.X DELIVERY ▲							GCCS-M 4.1 (JC2 Migration Build) ▲						JC2 / 5.X ▲							
Test & Evaluation Milestones																												
Development Test																												
Operational Test											GCCS-M Ver 4.X OT ▲					GCCS-M 4.1 (JC2 Migration Build) OT ▲						JC2 / 5.X OT ▲						
Production Milestones																												
Deliveries																												

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-5**	PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM				PROJECT NUMBER AND NAME 0709 GCCS-M MARITIME APPLICATIONS			
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Software Delivery - GCCS-M 4.X			Q2					
Operational Test GCCS-M 4.X			Q2					
Milestone C GCCS-M 4.X				Q2				
Software Delivery GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q2			
Operational Test GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q3			
Milestone C GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q4			
Software Delivery JC2/ 5.X							Q2	
Operational Test JC2/ 5.X							Q3	
Milestone C JC2/5.X							Q4	

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM				PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS						
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Total Program
Project Cost	**57.006**	**2.876**	**2.122**	**1.482**	**2.137**	**1.828**	**1.654**	**1.479**		**Continuing**	**Continuing**
RDT&E Articles Qty											

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

(U) Trusted Information Systems (TIS) is a combination of the Ocean Surveillance Information System (OSIS) Evolutionary Development (OED) system and the Radiant Mercury (RM) system incorporating multi-level security (MLS) web technologies. TIS provides the core on-line, automated, near-real time, multi-level secure, information analysis, dissemination, and receipt capabilities that enable Unified Commanders-in-Chief and Joint Task Force Commanders afloat and ashore to disseminate and receive critical operational and intelligence information with own forces and Coalition/Allied forces via tactical and record communications circuits. OED is a designated migration system providing for the analysis of intelligence information from multiple sources to produce a comprehensive report of foreign forces and potential hostile activity. The system is required to be able to generate multiple, automated near-real-time event-by-event (NRT EBE) data streams at various classification/releasability levels, tailorable to unique customer requirements and capable of being transmitted over multiple communications paths (including DSNET) simultaneously. In addition, it is required to provide near-real-time (NRT) all-source fusion, correlation and analysis tools (including robust graphics presentation and geospatial analysis capabilities), directly feeding automated reporting capabilities. OED provides positional data and operational intelligence to commanders at all levels. The data derived from this process is disseminated as an Operation Intelligence (OPINTEL) product to the operating forces for tactical threat warnings, decision making support, and support of Over-the-Horizon-Targeting. Radiant Mercury is a tool for the automated sanitizing, downgrading, and transliteration of formatted message traffic. Radiant Mercury helps ensure critical Indications and Warning intelligence is provided quickly to operational decision-makers. This capability to move all-source intelligence-derived track information into the realm of the operational community significantly improves the situational awareness of tactical operators and planners. Additionally, it assists in providing critical operational information to intelligence and crypto logic analysts. OED and RM are a linchpin of network-centric warfare, supporting joint operations and coalition forces in th War on Terrorism and in Homeland Security operations.

(U) TIS builds upon the foundation set by JMCIS OED project which uses the Joint Logistics Commander's Guidance of March 1987 on Evolutionary Acquisition (EA) as the strategy for future software development which includes a plan for incremental achievement of desired capability building on the core system provided by OBU Phases I and II. TIS is built on the foundation of JMCIS OED Phase III EA strategy, which provides a mechanism for adding future capabilities including the incorporation of proven fleet initiated prototypes.

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	2009 TRUSTED INFORMATION SYSTEMS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.411	0.760	0.796
RDT&E Articles Quantity			

Continue to implement, accredit and deploy MLS changes needed to support MLS email and Network Guard technology. Continue to develop entrusted client architecture using single level clients to evolve a Multi-Level Security design. Continue to develop entrusted client architecture using single level clients to evolve a Multi-Security Level design in conjunction with network guard, MLS email, and guard/sanitizer development.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.240	0.092	0.091
RDT&E Articles Quantity			

Continue to update message encoders, decoders and correlation algorithms as required to meet formatted message standards and changes in sensor data feeds.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.651	0.303	0.288
RDT&E Articles Quantity			

Continue to automate real time Indications and Warning/Situation Assessment capability to detect and auto alert users concerning movement patterns, complex threat conditions and other pre-defined spatial and data detection events. Continue to develop and implement improved tactical decision aids, and system alerting capabilities.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	2009 TRUSTED INFORMATION SYSTEMS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.334	0.202	0.199
RDT&E Articles Quantity			

OED - Plan migration to Network Centric Enterprise Services (NCES) architecture; RM - Plan migration to embedded VME card-like appllications.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.240	0.111	0.108
RDT&E Articles Quantity			

Continue to develop system interface capabilities as required for current releases for record communications systems with in an accreditable MLS baseline.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.654	0.000
RDT&E Articles Quantity			

Develop multi-level secure encryption path within shore-to-ship network for direct connectivity to allied networks. Enable Counter Terrorism (CT) data in afloat message handling systems and COP database. Enhance CT data mining and alerting tools at JICs.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	2009 TRUSTED INFORMATION SYSTEMS

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
GCCS-M TIS (OPN - BLI 2608)	1.539	1.529	1.966	3.135	1.751	1.308	3.306	Continuing	Continuing

(U) E. ACQUISITION STRATEGY:

N/A

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	2009 TRUSTED INFORMATION SYSTEMS

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget:	2.906	2.146	1.492
FY05 President's Budget:	2.876	2.122	1.482
Total Adjustments	-0.030	-0.024	-0.010
Summary of Adjustments			
FY 2003 Update	-0.030		
Section 8094: Management Improvements		-0.006	
Section 8126: Efficiencies /Revised Econ Assumptions		-0.018	
Inflation			-0.004
Non Purchase Inflation			-0.001
FY05 ITR RDTEN Balancing			-0.001
Manpower			-0.004
Subtotal	-0.030	-0.024	-0.010

(U) Schedule:

N/A.

(U) Technical:

N/A.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	VARIOUS	VARIOUS	9.077	0.253	VARIOUS	0.212	VARIOUS	0.152	VARIOUS	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			9.077	0.253		0.212		0.152		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VARIOUS	VARIOUS	45.215	2.568	VARIOUS	1.864	VARIOUS	1.298	VARIOUS	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			45.215	2.568		1.864		1.298		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS						
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											0.000	
Operational Test & Evaluation	PD	OPTEVFOR	0.630	0.000		0.000		0.000		Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.630	0.000		0.000		0.000		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	VARIOUS	VARIOUS	2.084	0.055	VARIOUS	0.046	VARIOUS	0.032	VARIOUS	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			2.084	0.055		0.046		0.032		Continuing	Continuing	
Remarks:												
Total Cost			57.006	2.876		2.122		1.482		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																													DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /**					PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM												PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS													
Fiscal Year	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											MILESTONE "C" - VERSION 5.X ▲											MILESTONE "C" - CDS VERSION 1.X ▲								
Prototype Phase																														
Development																														
Delivery																														
Software 5.X SW Delivery									DELIVERY 5X ▲											DELIVERY CDS VERSION 1.X ▲										
Test & Evaluation Milestones																														
Development Test										DT/OT - VERSION 5.X												DT/OT - CDS VERSION 1.X								
Operational Test										▲												▲								
Production Milestones																														
Deliveries																														

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2004**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E BA-5**	PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 2009 TRUSTED INFORMATION SYSTEMS			
Schedule Profile	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Software Delivery 5.X			Q1				
Developmental/Operational Test 5.X			Q2				
Milestone C 5.X			Q3				
Software Delivery CDS 1.X					Q4		
Developmental/Operational Test CDS 1.X						Q1	
Milestone C CDS 1.X						Q2	

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM					PROJECT NUMBER AND NAME 2305 GCCS-M COMMON APPLICATIONS					
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Total Program
Project Cost	**47.147**	**12.283**	**10.810**	**9.110**	**12.809**	**11.689**	**11.925**	**12.169**		**Continuing**	**Continuing**
RDT&E Articles Qty											

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

The GCCS-M Common Apps program contains the fundamental building blocks and common applications for all fielded Global Command and Control System (Maritime) C4I systems in the Navy, Marine Corps, and Coast Guard. It is the Navy's tactical implementation of the Global Command and Control System (GCCS) which provides the warfighter: (1) timely access to battlefield information, and (2) state-of-the-art information processing capability to support the Command and Control of maritime forces through a combination of communications, intelligence and combat system interfaces.

The Navy Common Operating Environment program is a core function of the GCCS-M Common Apps in that it serves as the system integration point for Command and Control systems in the Naval services. The program has the responsibility of working with developers throughout the Navy to incorporate the requirements of their users so that they might quickly and efficiently integrate and transform present stovepipe capabilities into an interoperable C4I architecture. As the number of legacy systems migrating to the Defense Information Infrastructure Common Operating Environment (DII COE) continues to grow, resources for rapidly folding them into the service extensions must keep pace as the complexity and size of the COE grows. As a product of evolutionary acquisition, the Navy COE will continue to evolve with the DII COE, new technology, and COMMERCIAL-OFF-THE-SHELF (COTS) products. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

GCCS-M Common Apps includes all C4I applications required to fully support Navy joint interoperability in the littoral environment, and includes all common functions such as track database management, message processing, display implementation, correlation and system architecture migration in order to ensure a coherent and consistent implementation of C4I architectures in the Fleet.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	2305 GCCS-M COMMON APPLICATIONS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.876	0.765	0.709	
RDT&E Articles Quantity				

FY03 - Aircraft Mission Planning / TACMOBILE: Developed and enhanced interfaces with aircraft mission planning systems. Enabled display of mission planning or mission routes and plans in GCCS-M along with threat and blue force data. Incorporated web-enabled TBMCS and developed required interfaces and procedures to insure interoperability with GCCS-M.

FY04 - Aircraft Mission Planning: Develop and enhance interfaces between GCCS-M and aircraft mission planning systems such as TBMCS and JMPS.

FY05 - Aerospace Operations: Integrate organic situational awareness capabilities with National, theater, and shipboard aerospace operations management systems to plan and execute aerospace operations and promote shared situational awareness.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	2.062	1.494	1.874	
RDT&E Articles Quantity				

FY03 - Web-Enabling/IT-21/Readiness: Researched and developed the N-tier architecture to support the transition of the USN C4I from the current client/server model to a web-enabled architecture per commercial e-commerce and e-business standards. Provided security infrastructure that will support SI and Collateral levels. Developed readiness capabilities which will integrate with Joint and coalition forces.

FY04 - Web-Enabling/Readiness: Continue to develop and implement the N-tier architecture. Integrate readiness capabilities that satisfy interoperability requirements of Joint and coalition forces, including web-based integration with GCCS-Joint, JOPES, and similar theater-level C4I systems.

FY05 - User Help and Documentation: Provide an embedded documentation and individual/team user help capability that emphasizes performance of mission capabilities.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	2.664	1.960	0.000	
RDT&E Articles Quantity				

FY03 - Testing/Usability (COMEXT/MAREXT): Performed systems testing in support of upcoming developmental and operational test and evaluation evolutions. Conducted proof of concept testing in exercise environments of emerging technology in the C4I arena.

FY04 - Testing/Usability: Continue to conduct proof of concept testing in exercise environments of emerging technology in the C4I arena. Perform systems testing on the integrated components of the Naval C4I architecture developed as part of GCCS-M.

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	2305 GCCS-M COMMON APPLICATIONS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.691	0.760	0.741	
RDT&E Articles Quantity				

FY03 - Combat Systems Interface: Provided C4I support of combat systems interfaces. Developed track management/correlation/merge processing as specified in WS-19702/1 to enable full exchange of tracks between GCCS-M, Aegis, Advanced Combat Direction System (ACDS), Ship Self Defense System (SSDS), and Naval Fire Control System (NFCS).

FY04 - Combat Systems Interface: Evolve combat system interfaces to web-enabled standards (XML) and enable full exchange of tracks between GCCS-M, and combat systems such as Aegis, Common C&D, ACDS, SSDS, and NFCS.

FY05 - C2/Navigation Systems Integration / C2/METOC Integration: Integrate with shipboard navigation systems to provide definitive ship location to the COP in support of shared situational awareness. Provide the capability to geo-register and render digital nautical charts/navigation quality map products. Integrate with shipboard meteorological systems to provide current and forecasted environmental data to execute maritime operations and promote shared situational awareness.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	4.627	4.185	4.155	
RDT&E Articles Quantity				

FY03 - JPN / TADILS / BROADCASTS: Supported Joint/coalition warfare by developing an interoperable & scalable C4I system. Implemented emerging TIBS requirements; modernized TIBS to support data feeds provided by advanced receiving systems, including IBS. Integrated and supported interfaces to the Joint Tactical Terminal Control Client. Enhanced and improved COP Sync Tools. Provided an automated mechanism for replicating web and newsgroup data from ship's servers to the Network Operations Centers (NOCs).

FY04 - JPN/TADILS/BROADCASTS: Implement the interoperable & scalable C4I system for managing tracks, data links, communications, and sensors that supports Joint/coalition warfare.

FY05 - Situational Awareness (SA) / Battle Force Command and Control (BFC2): Facilitate shared situational awareness by integrating information from shipboard sensors, emitters and real time event reporting networks into the COP. Provide assured SA and BFC2 by integrating information systems spanning GENSER, SCI, and Coalition security domains. Exchange shared situational awareness information via the COP with Joint and shipboard systems (e.g. combat, weapons control, navigation, cryptologic).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N - TACTICAL COMMAND SYSTEM	2305 GCCS-M COMMON APPLICATIONS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.000	0.150	0.200	
RDT&E Articles Quantity				

FY04 - Force Protection/Counter-terrorism: Research, develop and integrate tactical decision aides, analytical tools, and decision support tools to satisfy emergent operational C4I requirements for Force Protection and Counter-terrorism missions. Conduct rapid prototyping and end-to-end testing of these solutions to provide “speed of capability” to the warfighter. Ensure current and emergent functionality and capabilities provide improved interoperability with Allied and Coalition partners.

FY 05 - Emergent Capabilities: Provide the capability to rapidly incorporate emergent and transformational C2I capabilities that have been demonstrated through the experimentation process, and that satisfy Naval, Joint and Coalition C2I requirements.

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	1.363	1.496	1.431	
RDT&E Articles Quantity				

FY03 - Targeting / Land Track: Provided enhanced capability for the Naval JSTARS Interface segment per Fleet direction. Integrated fire control call for fire capability into the JTT/GCCS-M/JSIPS-N targeting architecture. Expanded ELINT data processing in GCCS-M to process specific emitter id data provided by enhanced sensor packages aboard P-3 AIP, U-2 and other national assets.

FY04 - C2 FIRES Integration: Integrate Command and Control systems with targeting systems at the Naval and Joint levels (e.g., Joint Fires Network). Develop and integrate Joint collaborative products into GCCS-M to enable analysts to exchange application and text data over IP communications.

FY05 - Maritime Mission Presentation of COP: Provide the capability to perform unique Shipboard Operations Execution Management tasks (e.g. maritime mission specific overlays/templates).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	2305 GCCS-M COMMON APPLICATIONS

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget:	12.486	10.964	9.197
FY05 President's Budget:	12.283	10.810	9.110
Total Adjustments	-0.203	-0.154	-0.087
Summary of Adjustments			
FY 2003 Update	-0.001		
Section 8094: Management Improvements		-0.029	
Section 8029: FFRDC Reduction		-0.007	
Section 8126: Efficiencies /Revised Econ Assumptions		-0.093	
WCF - R&D - SPAWAR			-0.008
Rates - SSC			0.021
Inflation			-0.024
Non Purchase Inflation			-0.005
Miscellaneous Adjustment			-0.006
FY 03 SBIR	-0.202		
SPAWAR Service Cost Center Adjustments		-0.025	-0.021
NWCF Rates - SPAWAR SSC Rates			-0.018
Manpower			-0.026
Subtotal	-0.203	-0.154	-0.087

(U) Schedule:

Previous versions of the GCCS-M 4.X development schedule were defined prior to designation of the OT platform. The USS Nimitz, CVN-68, was recently named as the OT platform (Ref: COMPACFLT PEARL HARBOR HI message R 261653Z AUG 03). Due to increased operations, ship availability schedules have been unstable. Based on the current, published ship availability schedule for the CVN-68, the OT process is now scheduled to begin in 4th Qtr FY04. There are no technical issues causing the schedule slip and there is no impact to future software development. In FY05, GCCS-M will begin migration to Joint Command and Control (JC2) development in coordination with the Joint Command and Control (JC2) Program.

(U) Technical:

N/A.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N - TACTICAL COMMAND SYSTEM	PROJECT NUMBER AND NAME 2305 GCCS-M COMMON APPLICATIONS

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
GCCS-M (OPN - BLI 2608)	36.514	27.894	41.148	81.818	41.400	64.009	75.722	Continuing	Continuing

(U) E. ACQUISITION STRATEGY:

N/A

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM			PROJECT NUMBER AND NAME 2305 GCCS-M COMMON APPLICATIONS						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	VAR	VAR	5.678	1.175	VAR	1.157	VAR	0.883	VAR	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			5.678	1.175		1.157		0.883		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	VAR	VAR	34.239	9.228	VAR	7.800	VAR	6.813	VAR	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			34.239	9.228		7.800		6.813		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM				PROJECT NUMBER AND NAME 2305 GCCS-M COMMON APPLICATIONS						
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	VAR	VAR	4.535	0.956	VAR	0.941	VAR	0.719	VAR	Continuing	Continuing	
Operational Test & Evaluation	VAR	VAR	0.643	0.219	VAR	0.217	VAR	0.165	VAR	Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			5.178	1.175		1.158		0.884		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	VAR	VAR	2.052	0.705	VAR	0.695	VAR	0.530	VAR	Continuing	Continuing	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			2.052	0.705		0.695		0.530		Continuing	Continuing	
Remarks:												
Total Cost			47.147	12.283		10.810		9.110		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N - TACTICAL COMMAND SYSTEM	2305 GCCS-M COMMON APPLICATIONS

Fiscal Year	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										GCCS-M 4.X MS C ▲						GCCS-M 4.1 (JC2 Migration Bld) MS C ▲							JC2 / 5.X MS C ▲						
Prototype Phase																												
Development																												
Delivery																												
Software Deliveries									GCCS-M Ver 4.X DELIVERY ▲							GCCS-M 4.1 (JC2 Migration Build) ▲						JC2 / 5.X ▲							
Test & Evaluation Milestones																												
Development Test																												
Operational Test											GCCS-M Ver 4.X OT ▲					GCCS-M 4.1 (JC2 Migration Build) OT ▲						JC2 / 5.X OT ▲						
Production Milestones																												
Deliveries																												

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2004**		
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-5**	PROGRAM ELEMENT 0604231N - TACTICAL COMMAND SYSTEM				PROJECT NUMBER AND NAME			
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Software Delivery - GCCS-M 4.X			Q2					
Operational Test GCCS-M 4.X			Q2					
Milestone C GCCS-M 4.X				Q2				
Software Delivery GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q2			
Operational Test GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q3			
Milestone C GCCS-M 4.1 (JC2/ 5.X Migration Build)					Q4			
Software Delivery JC2/ 5.X							Q2	
Operational Test JC2/ 5.X							Q3	
Milestone C JC2/5.X							Q4	

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2307 Integrated Shipboard Network System (ISNS)					
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	**12.861**	**1.503**	**1.026**	**1.685**	**1.241**	**1.366**	**1.393**	**1.421**	**Continuing**	**Continuing**
RDT&E Articles Qty										

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

The Integrated Shipboard Network System (ISNS) program provides every Navy ship, including submarines, with a reliable, high-speed Local Area Network (LAN) that will provide LAN and Wide Area Network (WAN) access to the DISN WAN (Secure and Nonsecure Internet Protocol Router Network - SIPRNet and NIPRNet). It provides real-time information exchange between afloat units, Component Commanders, numbered Fleet Commanders and Fleet CINCs through the migration of existing legacy systems into the IT-21 strategy and is a key factor in the implementation of the Navy's portion of Joint Vision 2010. Under the Navy's information modernization strategy, full synchronization of shipboard networks, mission and information applications and Radio/Satellite communications and shore data dissemination infrastructure, installations are necessary to ensure end-to-end mission capability. The ISNS program maximizes the use of both COTS software and hardware resulting in dependence on commercially supported hardware and software. Engineering and technical support is provided so that existing systems will keep pace with hardware and software that is supported commercially.

The Integrated Shipboard Networking System (ISNS) project uses a combination of high speed switches, routers, servers and workstations, commercial networking, security and operating system software technologies to provide network access to classified and unclassified applications for use by ship's force, embarked units, embarked commanders and their staffs. The Integrated Shipboard Networking System is integrated with the Automated Digital Networking System (ADNS) and existing RF systems.

Under the Navy's information modernization strategy, full synchronization of shipboard networks, mission and information applications, Radio/Satellite communications and shore data dissemination infrastructure, installations are necessary to ensure end-to-end mission capability. The Integrated Shipboard Networking System program is closely synchronized on a ship by ship basis with the following dependent programs: Global Command and Control System Maritime (GCCS-M) and Navy Tactical Command Support System (NTCSS); and with these other related programs: Navy Standard Integrated Personnel System (NSIPS), Theatre Medical Information Program – Maritime (TMIP-M), Defense Messaging System (DMS), Extremely High Frequency Satellite Communication (EHF SATCOM), Super High Frequency Satellite Communication (SHF SATCOM), Commercial SATCOM, Ultra High Frequency Satellite Communication (UHF SATCOM), Digital Wideband Transmission System (DWTS), ADNS, Digital Modular Radio (DMR), Global Broadcasting System (GBS), Video Information Exchange System (VIXS) and Information Security (INFOSEC) programs. The ISNS program provides infrastructure to support implementation/fielding of programs listed above. If the ISNS infrastructure is not in place, a large segment of the Fleet will not be able to utilize the available capabilities to improve productivity and increase efficiency. The ISNS program maximizes the use of Commercial off the shelf (COTS) software and hardware resulting in dependence on these items being commercially supported. The LAN modernization rate must keep pace with hardware and software that is supported commercially.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROJECT NUMBER AND NAME 2307 Integrated Shipboard Network System (ISNS)

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.503	1.026	1.685
RDT&E Articles Quantity			

(FY03) Investigated, developed and tested switch technology upgrades to the Shipboard LAN architecture. Investigated, developed and tested Next Generation LAN Protocols to incorporate into existing Shipboard LAN architecture to ensure that technology replacement continues to advance with the changing technology. Performed developmental testing in support of MS C for Block 1 architecture.

(FY04-FY05) Continue to investigate, develop and test next generation LAN Protocols (including Wireless LAN, Network management and administration, Secure/Nonsecure Voice, Internet Protocol Video and Quality of Service protocols) for potential incorporation into the Shipboard LAN architecture. Investigate, integrate and test data prioritization, advanced data storage and management, next generation server/workstation operation systems and fixes for security vulnerabilities. Perform studies to increase availability and survivability of networks and reduce network infrastructure footprint. Continual investigation of protocols, hardware, and software for insertion into the LAN architecture is driven by eighteen month technology change cycle and maintaining a secure network against evolving threats. Perform follow-on system developmental and operational testing. Perform developmental testing and operational testing of Block 1 and Block 2 architecture. The testing events will support MS C for Block 2 Architecture.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	2307 Integrated Shipboard Network System (ISNS)

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
President's Budget:	1.567	1.041	1.697
Current BES/OSDBudget	1.503	1.026	1.685
Total Adjustments	-0.064	-0.015	-0.012
Summary of Adjustments			
FY2003 Update	-0.053		
FY03_SBIR_5-May-03	-0.011		
Sec 8094 Management Improvements		-0.003	
Sec 8126 Effeiciencies/Revised Econ Assumptions		-0.009	
SPAWAR Service Cost Center Adjustments		-0.003	-0.005
NWCF Rates - SPAWAR SSC Rates			-0.004
WCF - R&D - SPAWAR			-0.002
ates - SSC			0.005
Inflation			-0.004
Non-purchase Inflation			-0.001
Miscellaneous Adjustment			-0.001
Subtotal	-0.064	-0.015	-0.012

(U) Schedule:

Not Applicable.

(U) Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	2307 Integrated Shipboard Network System (ISNS)

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
BLI: 3050 COMM AUTO - ISNS	53.574	118.631	71.471	203.823	41.742	73.346	114.484	Cont.	Cont.

(U) E. ACQUISITION STRATEGY:

Acquisition, Management and Contracting Strategy are to support:
Investigated, developed and tested server and workstation technology upgrades to incorporate into existing architecture.

Note: ACAT 1AC designation requested by DASN (14 Aug 02).

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: **February 2004**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 2307 Integrated Shipboard Network System (ISNS)						
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	MIPR	FEDSIM/SAIC	1.211	0.253	12/02	0.1874	12/03	0.305	12/04	Continuing	Continuing	
Primary Hardware Development	WX	SSC CH	1.709	0.240	12/02	0.1874	12/03	0.305	12/04	Continuing	Continuing	
Primary Hardware Development	WX	SSC SD	1.094	0.286	12/02	0.2443	12/03	0.446	12/04	Continuing	Continuing	
Primary Hardware Development	TMM	EDS	0.196								0.196	
Systems Engineering	MIPR	MITRE	0.426								0.426	
Systems Engineering	MIPR	FEDSIM/SAIC	1.213	0.222	12/02	0.0625	12/03	0.085	12/04	Continuing	Continuing	
Systems Engineering	Various	Various	0.810								0.810	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			6.659	1.001		0.6815		1.141		0.000	9.483	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System			PROJECT NUMBER AND NAME 2307 Integrated Shipboard Network System (ISNS)							
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
Test & Evaluation	WX	SSC CHS	0.570	0.100	12/02	0.073	12/03	0.119	12/04	Continuing	Continuing	
Test & Evaluation	WX	SSC SD	1.047	0.185	12/02	0.146	12/03	0.255	12/04	Continuing	Continuing	
Test & Evaluation	WX	SSC Chespk	0.555	0.137	12/02	0.063	12/03	0.102	12/04	Continuing	Continuing	
Operational Test & Evaluation	WR	OPTEVFOR	0.206	0.080	12/02	0.062	12/03	0.068	12/04	Continuing	Continuing	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			2.378	0.502		0.344		0.544		0.000	3.768	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	WX	SSC CHS	0.257								0.257	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			0.257	0.000		0.000		0.000		0.000	0.257	
Remarks:												
Total Cost			9.294	1.503		1.026		1.685		0.000	13.508	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R4, Schedule Profile — DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /	0604231N Tactical Command System	2307 Integrated Shipboard Network System (ISNS)

Fiscal Year	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										FRP △		MSC △			FRP △					MS C △			FRP △					
Engineering Development	Block 1 (Gig E)								Block 2								Block 3											
Test & Evaluation Milestones				DT			DT				DT									DT/ OA								
Development Test				□			□				□									□								
Operational Test								OT □						OT □														
Production Milestones																												
LRIP FY 02	Block I (Gig E) LRIP																											
Deliveries																												

Notes:

ISNS has been fielding ATM LAN since FY98 as part of the GCCSM and NTCSS acquisition programs.

Block 1 (known as GiG E) is an evolution of ATM LAN that will have its own Acquisition Documentation and formal LRIP.

OT date has been delayed due to ship's schedule. ORD revision is in process to further define Blocks 2 & 3.

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2004**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA 5**		PROGRAM ELEMENT 0604231N Tactical Command System			PROJECT NUMBER AND NAME 2307 Integrated Shipboard Network System (ISNS)			
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Milestone C (MS C for Blocks 1, 2 & 3)				4Q		4Q		
Developmental Testing		4Q	3Q	3Q				
Operational Testing			4Q		2Q			
Developmental Testing/Operational Assessment						4Q		
Start Low-Rate Initial Production (Block 1 (Gig E) LRIP)								
Full Rate Production Start				2Q	3Q		3Q	

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System					PROJECT NUMBER AND NAME 3032 NTCSS					
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Total Program
Project Cost	**4.790**	**4.605**	**3.277**	**0.071**	**0.047**	**0.047**	**0.054**	**0.052**	**0.000**	**Continuing**	**Continuing**
RDT&E Articles Qty	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**3**

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

Navy Tactical Command Support Systems (NTCSS) - This RDT&E Project funding supports design, development and testing of the components of the NTCSS web initiative:
(1) Web-enabling the NTCSS application suite, (2) NTCSS Enterprise Database and (3) Maritime Logistics Data Network (MLDN). The development of a web-enabled Enterprise Database for NTCSS application will place all NTCSS databases into a similar structure, allowing greater interoperability between applications to meet Next Generation Network (NGN) requirements both afloat and ashore. MLDN will facilitate the movement of administrative workload from ships to shore.

(U) JUSTIFICATION FOR BUDGET ACTIVITY:

This program is funded under ENGINEERING AND MANUFACTURING DEVELOPMENT because it encompasses engineering and manufacturing development of new end-items prior to production approval decision.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	3032 NTCSS

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments	4.605	3.277	0.071	
RDT&E Articles Quantity			1	

FY 2003 ACCOMPLISHMENT:
Continued Web-enabling of NTCSS applications and enterprise database design, development and testing & support and documentation. MLDN tasks were focused on developing the communications and security architecture needed to implement the MLDN capability throughout the fleet.

FY2004 AND FY2005 PLAN:
MLDN tasks are focused on developing the communications and security architecture needed to implement the MLDN capability throughout the fleet. Prototype MLDN and Enterprise Database delivered in FY05.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	3032 NTCSS

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget	4.906	3.314	3.332
FY05 President's Budget	4.605	3.277	0.071
Total Adjustments	-0.301	-0.037	-3.261
Summary of Adjustments			
Miscellaneous Adjustments	-0.301		
Sec 8084: Management Improvements		-0.009	
Sec 8126: Efficencies/Revised Econ. Assumptions		-0.028	
Logistics Domain			-3.250
Inflation			-0.009
Non Purchase Inflation			-0.002
Subtotal	-0.301	-0.037	-3.261

(U) Schedule:

Not Applicable.

(U) Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	3032 NTCSS

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
OPN 261100 Naval Tactical Command Support System	31.616	51.253	26.208	81.090	13.760	31.035	39.253	Continuing	Continuing
RDT&E PE 0605013N 3054 Navy Web-enabling	1.969	0	0	0	0	0	0		

(U) E. ACQUISITION STRATEGY:

The NTCSS Acquisition Strategy is defined in its Single Acquisition Management Plan (SAMP) dtd 7 May 99.

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System			PROJECT NUMBER AND NAME 3032 NTCSS							
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	Various	Various	0.600	0.034	10/02	0.034	10/03	0.000	10/04	Continuing	Continuing	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	Various	Various	0.700	0.150	10/02	0.150	10/03	0.000	10/04	Continuing	Continuing	
Training Development											0.000	
Licenses	Various	Various	0.400	0.200	10/02	0.100	10/03	0.000	10/04	Continuing	Continuing	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			1.700	0.384		0.284		0.000		Continuing	Continuing	
Remarks:												
Development Support											0.000	
Software Development	Various	Various	2.729	3.135	10/02	2.008	10/03	0.056	10/04	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management	Various	Various	0.100	0.180	10/02	0.180	10/03	0.000	10/04	Continuing	Continuing	
Technical Data	Various	Various		0.100	10/02	0.100	10/03	0.000	10/04	Continuing	Continuing	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			2.829	3.415		2.288		0.056		0.000	8.588	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 3032 NTCSS						
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	Various	Various	0.035	0.275	10/02	0.275	10/03	0.015	10/04	Continuing	Continuing	
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			0.035	0.275		0.275		0.015		0.000	0.600	
Remarks:												
Contractor Engineering Support	Various	Various	0.184	0.406	10/02	0.306	10/03	0.000	10/04	Continuing	Continuing	
Government Engineering Support	Various	Various	0.030	0.125	10/02	0.124	10/03	0.000	10/04	Continuing	Continuing	
Program Management Support											0.000	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			0.214	0.531		0.430		0.000		0.000	1.175	
Remarks:												
Total Cost			4.778	4.605		3.277		0.071		Continuing	Continuing	
Remarks:												

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EXHIBIT R4, Schedule Profile																																
																															DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**									PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System												PROJECT NUMBER AND NAME 3032 NTCSS											
Fiscal Year					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	1	2	3	4
Acquisition Milestones																																
Unit Level eNTCSS Development					X	X	X																									
Unit Level eNTCSS Demonstration							X	X	X	X																						
ERP Afloat Convergence Demonstration											X	X	X	X	X	X	X															
Unit Level Convergence LRIP															X	X	X	X	X	X												
Force Level Convergence LRIP																			X	X	X	X	X	X								
Test & Evaluation Milestones																																
Unit Level eNTCSS FOT&E													X	X																		
Unit Level Convergence IOT&E																X	X	X														
Force Level Convergence IOT&E																				X	X	X										
Production Milestones																																
Unit Level eNTCSS MSD														X																		
Unit Level Convergence MSD																																
Force Level Convergence MSD																																
Deliveries																																

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

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2004**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT 0604231N Tactical Command System			PROJECT NUMBER AND NAME 3032 NTCSS			
Schedule Profile	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Unit Level eNTCSS Development	Q1-Q3						
System Design Review (SDR)	Q3						
Critical Design Review (CDR)	Q4						
Unit Level eNTCSS Demonstration	Q3-Q4	Q1-Q2					
Unit Level eNTCSS FOT&E			Q1-Q2				
ERP Afloat Convergence Demonstration		Q3-Q4	Q1-Q4	Q1			
Unit Level Convergence IOT&E			Q4	Q1-Q2			
Developmental Test Readiness Review (DTRR) Unit Level Convergence				Q2			
Developmental Testing Unit Level Convergence				Q2			
Operational Test Readiness Review (OTRR) Unit Level Convergence				Q3			
Operational Testing Unit Level Convergence				Q3-Q4			
Unit Level Convergence LRIP			Q3-Q4	Q1-Q4			
Unit Level eNTCSS MSD			Q2				
Unit Level Convergence MS D				Q4			
Unit Level Convergence IOC					Q1		

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2004**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N FORCEnet				PROJECT NUMBER AND NAME 9123 FORCEnet			
COST ($ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		**12.298**	**7.759**	**15.630**	**17.095**	**19.034**	**21.008**	**22.987**
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: On 21 February 2002, in response to conclusions and recommendations from extensive studies by CNO Strategic Studies Group (1998-2002), Army (Future Combat System (FCS)), and Air Force (Joint Battlespace Info-Sphere (JBI)), CNO has directed a quantitative and rigorous analysis of the warfighting requirements and effects of Network Centric Warfare (NCW) across all of Naval Doctrine, Logistics, Tactics, Techniques, Procedures (TTPs), and Systems. The Director FORCEnet (DFn) designation letter directed that FORCEnet establish the Navy's future requirements for an end-to-end plan to transform its warfighters, organizations, TTPs, systems, platforms and technologies to a fully netted, integrated, and NCW capable force. FORCEnet transforms the NCW vision into an operational strategy through a transformational spiral development of the next generation of Naval warfighting capabilities. FORCEnet implements the Navy's Transformation Vision – Sea Power 21 – and enables the pillars of Sea Strike (projecting precise and persistent offensive power), Sea Sheild (projecting global defensive assurance), and Sea Basing (projecting sustainable Joint operational independence), as well as the supporting initiatives of Sea Trial (accelerating enhanced capabilities through innovation and experimentation), Sea Enterprise (maximizing business efficiencies), and Sea Warrior (maximizing human capital).

FORCEnet is the USN/USMC enterprise alignment and integration effort. The mission of this effort is:
· DoN/DoD transformation;
· Accelerated Innovation, Testing, Assessment, and Fielding of Warfighter Capability;
· Joint/Allied/Coalition interoperability;
· Development and implementation of enterprise requirements, architectures and standards.

DoN/DoD transformation:
FORCEnet looks across warfare mission areas to identify capabilities and efficiencies that would not otherwise be realized under the existing paradigm of individual stove-piped programs and efforts. A key enabler of the CNO's Sea Power 21 Vision, FORCEnet represents the Navy's end-to-end concept, process and plan for evolutionary requirements transformation of its people and warfighting culture, processes, organizational structures, and technologies to a fully netted, integrated, and Network Centric force. FORCEnet analysis identifies potential synergies that are gained by integrating and aligning individual existing/planned efforts as well as organizational realignment. Efforts, started in FY03, focus on conducting the detailed technical analysis for FORCEnet mission capability and equipment roadmaps, developing the decision support system necessary to manage the roadmaps, establishing a FORCEnet collaborative environment, and supporting experimentation events. The development of the roadmaps will concentrate on defining the Navy's and Marine Corps minimum executable combat capability required to support/sustain all warfighting mission areas. Fact based decision tools, experimentation and analysis are used to perform trades across the operational, technical, financial and programmatic dimensions. Thus, with a relatively modest investment, FORCEnet is able to make substantial gains on transformation by providing analysis for the most efficient and effective combination of platforms, sensors, and weapons necessary to provide the foundation for battlespace dominance and fully integrated intelligence, surveillance and reconnaissance systems to support the tenets of Network Centric Warfare. These analysis and resulting alignments direct specific responsibilities and collectively enhance the ability of the Department to realize FORCEnet. Another important aspect to transformation is the warrior. The warrior key to the successful implementation of FORCEnet and NCW. FORCEnet will focus and build on existing efforts regarding warrior training and retention and will drive application of Human Systems Integration (HIS) early in system design and in development of operational concepts and TTP.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N FORCEnet	9123 FORCEnet

Accelerated Innovation, Testing, Assessment, and Fielding of Warfighter Capability;
A key mission of FORCEnet is the accelerated innovation, testing, assessment, and fielding of Warfighter Capability through an innovation continuum that takes advantage of existing planned events, and couples them together in innovative ways to maximize impact. Most recently, FORCEnet led Trident Warrior 03 which delivered FORCEnet capabilities to the Seventh Fleet operating forces in September 2003. In addition, working in concert with the ongoing efforts, FORCEnet is leveraging ongoing experimentation efforts such as the Fleet Battle Experiments, GIANT SHADOW and SILENT HAMMER initiatives to take advantage of transformational capabilities. Coupled with a coherent investment strategy that supports the transformational concepts of operation envisioned by Seapower 21, FORCEnet will implement transformation department wide and accelerate the delivery of FORCEnet by putting tomorrow's FORCEnet capability in the hands of the warfighter today.

Joint/Allied/Coalition Interoperability
FORCEnet was established on the premise of joint interoperability. This goal will be supported by the establishment of high-level joint architecture tenets and standards as elements of a FORCEnet "blueprint", as part of a strong cross-program systems engineering effort under the FORCEnet Chief Engineer. This blueprint will be based on joint and industry standards, with development and implementation coordinated with transformation initiatives in the Army, Air Force, and Coast Guard as well as Joint commands and allies. In addition, FORCEnet planning is being coordinated with allies and coalition partners. In 2002 and 2003, FORCEnet discussions were held with Australia, Canada, United Kingdom, New Zealand, the Netherlands, Germany and Italy. FORCEnet will enhance Joint and Allied interoperability through interactions and coordination with the Joint Forces Command Joint Battle Management Command and Control effort and the Family of Interoperable Pictures initiative. FORCEnet will leverage a series of joint Limited Objective Experiments, examining Interservice interoperability issues, as well as ongoing efforts to converge service and allied architectures. FORCEnet will build upon existing Joint capabilities to bridge the gap of legacy systems as we migrate to the Global Information Grid.

Development and implementation of enterprise requirements, architectures and standards.

The military capabilities required by Naval Forces to support Joint Transformation and Network Centric Warfare (NCW) are identified through a FORCEnet Capabilities-Based Requirements Process and Fleet-validated through a Fleet-led requirements integration and experimentation process. Responding to the direction of Congress, FORCEnet is defining enterprise requirements (operational requirements, system/technical requirements, support/policy and implementation requirements), architectures and standards. The working baseline requirements have been published in the FORCEnet Campaign Plan. The enterprise instantiation of FORCEnet requirements, architectures and standards will happen through FORCEnet compliance and infusion into acquisition (through efforts such as the FORCEnet Pilot Programs) and through a continual spiral development process (via innovation and experimentation) for operational refinement and updates.

In summary, FORCEnet is the unique vehicle to meet the CNO's requirement to analyze, develop, establish, and sustain a holistic approach to NCW requirements across all Naval warfighting missions. No existing Naval organization provides the analytical rigor across the breath of operational and programmatic warfighting dimensions of the Naval Force.

Specific FORCEnet products include: (a) Validated FORCEnet requirements; (b) FORCEnet transformation roadmaps which will define the Navy and Marine Corps minimum executable combat capability required to support/sustain warfighting mission areas; (c) A dynamically reconfigurable set of metrics required to manage FORCEnet combat effects which interacts with the "Fact-Based Decision Model" taking into account financial and technical aspects; (d) A Fact-Based Decision software Model which will contrast investment decision versus warfighting capability; (e) A collaborative capability required to demonstrate and study the various concepts of integrated warfare and combined force effects provided by FORCEnet; (f) All related POM investment strategies (g) FORCEnet experimentation and speed to capability (h) a FORCEnet Collaborative Environment (FnCE) that allows trades across operational, technical, financial and programmatic dimensions and provides an outreach to industry for commercial solutions (i) analytically defendable investment plans and mission capability platform and equipment roadmaps through qualitative and quantitative analysis. (j.) Cost vs. combat capability trades will be executed in conjunction with the FORCEnet virtual environment (FnVE).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N FORCEnet	9123 FORCEnet

(U) FORCEnet TEAM AND PARTNERSHIPS:

· OPNAV, CFFC/NETWARCOM, Navy Warfare Development Command (NWDC), ONR, SYSCOMs (NAVSEA, NAVAIR, SPAWAR, MCSC), and RDA CHENG, JFCOM

· Supporting commands and activities: CNO SSG, CNO N00K, MCCDC, High Performance Computing Modernization Office, Naval Post Graduate School, U.S. Naval Academy, Naval War College, John Hopkins University, MIT Lincoln Labs, COMOPTEVFOR, NETC, DARPA, Army FCS, Air Force JBI, JFCOM and OSD

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA5	0604231N FORCEnet	9123 FORCEnet

B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	12.298	7.759	15.630
RDT&E Articles Quantity			

FORCEnet

Industry Survey & Alignment (Industry White Paper Requests, Industry White Paper Evaluation, Acquisition Wargaming, FORCEnet Refinement/Analysis of Requirements); Limited Objective Experiments (Alignment with EC5G, ESG, NFN, TFWeb and FBE-J/K, Alignment with FBE-L, tactics, techniques and procedures; Virtual Environment Test Events (Real-time, Joint, Integrated Hardware, Simulation, and Warriors, Platform/Equipment/Capability Roadmap based on Qualitative/Quantitative Data); Analytical Tools, Methods, Metrics (Requirements/Metrics Definition, Platform Survey, Collaborative Environment Development & Integration, Fact Based Decision Tools); Roadmaps, Analysis and Evaluation (Operational & Engineering Standards, Architecture Analysis, User Information Analysis & Use Case Framework); Collaborative Environment (Capability Alignment, Process Definition & Implementation, Configuration Management).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N FORCEnet	9123 FORCEnet

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	12.509	14.654	15.669
Current BES/President's Budget	12.298	7.759	15.630
Total Adjustments	-0.211	-6.895	-0.039
Summary of Adjustments			
FY03_SBIR_5-May-03	-0.146	-	-
MRTFB NMCI SHORTFALL	-0.053	-	-
NWCF Rates - NAWC Rates	-	-	-0.023
Section 8094: Management Improvements	-	0.016	-
Sec. 8126: Efficiencies/Revised Econ. Assumptions	-	0.056	-
FORCEnet Limited Objective Experiments	-	-6.800	-
Section 8094: Management Improvements	-	-0.039	-
Sec. 8029: FFRDC Reduction	-	-0.004	-
Sec. 8126: Efficiencies/Revised Econ. Assumptions	-	-0.124	-
FY 2003 Update	-0.012	-	-
WCF - R&D - NAWC	-	-	0.022
NAWC	-	-	0.023
Inflation	-	-	-0.042
non purchase inflation	-	-	-0.009
Misc Adjustments	-	-	-0.010
Subtotal	-0.211	-6.895	-0.039

(U) Schedule:
NOT APPLICABLE

(U) Technical:
NOT APPLICABLE

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N FORCEnet	PROJECT NUMBER AND NAME 9123 FORCEnet

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
N/A									

E. ACQUISITION STRATEGY:

Not Applicable

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N FORCEnet			PROJECT NUMBER AND NAME 9123 FORCEnet						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration	Various	Various				0.935	Various	2.109	Various	Continuing	Continuing	
Ship Suitability											0.000	
Systems Engineering	Various	Various		0.800	Various	0.800	Various	0.800	Various	Continuing	Continuing	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	0.800		1.735		2.909		Continuing	Continuing	
Remarks:												
Development Support	Various	Various		1.100	Various	1.600	Various	1.600	Various	Continuing	Continuing	
Software Development	Various	Various		2.300	Various	0.600	Various	0.600	Various	Continuing	Continuing	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses	Various	Various		1.100	Various	2.400	Various	3.700	Various	Continuing	Continuing	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	4.500		4.600		5.900		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**			PROGRAM ELEMENT 0604231N FORCEnet			PROJECT NUMBER AND NAME 9123 FORCEnet						
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	Various	Various		0.500	01/03	0.800	Various	2.200	Various	Continuing	Continuing	
Operational Test & Evaluation								3.000	Various	Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.500		0.800		5.200		Continuing	Continuing	
Remarks:												
Technical Support	Various	Various		1.500	10/02	0.624	Various	1.621	Various	Continuing	Continuing	
Government Engineering Support	Various	Various		3.899	10/02					Continuing	Continuing	
Program Management Support				0.800	10/02					Continuing	Continuing	
Travel				0.299	10/02					Continuing	Continuing	
Transportation											0.000	
											0.000	
Subtotal Management			0.000	6.498		0.624		1.621		Continuing	Continuing	
Remarks:												
Total Cost			0.000	12.298		7.759		15.630		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 91

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0605013N Navy Information Technology Dev/Mod					PROJECT NUMBER AND NAME 9372 3D Common Operational Picture					
COST ($ in Millions)	Prior Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost			**0.000**	**1.682**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**1.682**
RDT&E Articles Qty											**0**

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:.
Congressional Add will provide a three-dimensional visualization for critical core GCCS-M Common Operational Picture (COP) capabilities and services. This includes track symbology, geospatial overlays, tactical decision aids to support aerospace operations planning and execution such as air corridors and airspace use areas, and topographic analysis support functions such as sensor coverage areas, fade zones, and terrain masking.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0605013N Navy Information Technology Dev/Mod	9372 3D Common Operational Picture

(U) B. Accomplishments/Planned Program

		FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost		0.000	1.682	0.000
RDT&E Articles Quantity				

FY2004 PLANS:
Congressional Add will provide a three-dimensional visualization for critical core GCCS-M Common Operational Picture (COP) capabilities and services. This includes track symbology, geospatial overlays, tactical decision aids to support aerospace operations planning and execution such as air corridors and airspace use areas, and topographic analysis support functions such as sensor coverage areas, fade zones, and terrain masking.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0605013N Navy Information Technology Dev/Mod	9372 3D Common Operational Picture

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget	0.000	0.000	0.000
FY05 President's Budget	0.000	1.682	0.000
Total Adjustments	0.000	1.682	0.000

Summary of Adjustments

Congressional Add 3D Common Operational Picture			1.700	
Issue 68041 - Sec 8094: Management Improvements			-0.004	
Issue 68066 - Sec 8126: Efficiencies/Revised Econ Assumptions			-0.014	
Subtotal	0.000	0.000	1.682	0.000

(U) Schedule:

Not Applicable.

(U) Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0605013N Navy Information Technology Dev/Mod	9372 3D Common Operational Picture

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
Not Applicable									

(U) E. ACQUISITION STRATEGY:

Not Applicable

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0605013N Navy Information Technology Dev/Mod			PROJECT NUMBER AND NAME 9372 3D Common Operational Picture							
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
3D COP	TBD	TBD				1.682	Various				1.682	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	0.000		1.682		0.000		0.000	1.682	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0605013N Navy Information Technology Dev/Mod			PROJECT NUMBER AND NAME 9372 3D Common Operational Picture							
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											0.000	
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			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			0.000	0.000		1.682		0.000		0.000	1.682	
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2004**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**	PROGRAM ELEMENT NUMBER AND NAME 0604231N Tactical Command System					PROJECT NUMBER AND NAME 9373 AN/UYQ-70 Based IT-21 C4ISR Upgrades					
COST ($ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Cost to Complete	Total Program
9373 AN/UYQ-70 Based IT-21 CEISR Upgrades	**0.000**	**0.000**	**2.521**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**2.521**
RDT&E Articles Qty											**0**

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:.

Congressional Add will provide the following in support of AN/UYQ-70 Based IT-21 C4ISR Upgrades:

Research current C4ISR software applications and design an integration approach for transition from legacy networks to an enterprise solution. Implement the C4ISR-T Systems Design effort that will incorporate the AN/UYQ-70 rack design. Develop an overarching Q-70 BLK system integration, test plan and validation that ensures the Q-70 racks are fully integrated and tested. Develop hardware baseline for integration into the Q-70 servers. Integration to include standardized configuration, integrated documentation and integrated software applications. Develop and implement an Integrated Logistics Support (ILS) Plan ensuring provisioning, training, technical manuals, support and test equipment (S&TE), Planned Maintenance System (PMS) availability, and other ILS requirements are me

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	9373 AN/UYQ-70 Based IT-21 C4ISR Upgrades

(U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05	
Accomplishments/Effort/Subtotal Cost	0.000	2.521	0.000	
RDT&E Articles Quantity				

FY2004 PLANS:
· Research current C4ISR software applications and design an integration approach for transition from legacy networks to an enterprise solution. Implement the C4ISR-T Systems Design effort that will incorporate the AN/UYQ-70 rack design.
· Develop an overarching Q-70 BLK system integration, test plan and validation that ensures the Q-70 racks are fully integrated and tested.
· Develop hardware baseline for integration into the Q-70 servers. Integration to include standardized configuration, integrated documentation and integrated software applications.
· Develop and implement an Integrated Logistics Support (ILS) Plan ensuring provisioning, training, technical manuals, support and test equipment (S&TE), Planned Maintenance System (PMS) availability, and other ILS requirements are met.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	9373 AN/UYQ-70 Based IT-21 C4ISR Upgrades

(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2003	FY 2004	FY 2005
FY04 President's Budget	0.000	0.000	0.000
FY05 President's Budget	0.000	2.521	0.000
Total Adjustments	0.000	2.521	0.000

Total Adjustments

Summary of Adjustments

AN/UYQ-70 Based IT-21 C4ISR Upgrades		2.550	
Sec 8094: Management Improvements		-0.007	
Sec 8126: Efficiencies/Revised Econ Assumptions		-0.022	
Subtotal	0.000	2.521	0.000

(U) Schedule:

Not Applicable.

(U) Technical:

Not Applicable.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2004**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-5	0604231N Tactical Command System	9373 AN/UYQ-70 Based IT-21 C4ISR Upgrades

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004
OPN: LI 3057 BLI 305700 AN/UYQ-70 for IT 21	8,713	
OPN: LI 2611 BLI 261100 AN/UYQ-70 for IT 21		5,100
RDT&E PE 0604707N 9054 IT-21 Block 1 CAISR Computing Equipment Upgrades	1,619	

(U) E. ACQUISITION STRATEGY:

Not Applicable.

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2004**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System			PROJECT NUMBER AND NAME 9373 AN/UYQ-70 Based IT-21 C4ISR Upgrades							
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		Various				0.504	Various				0.504	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering		Various				1.765	Various				1.765	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	0.000		2.269		0.000		0.000	2.269	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support		Various				0.252	Various				0.252	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.252		0.000		0.000	0.252	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: **February 2004**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-5**		PROGRAM ELEMENT 0604231N Tactical Command System				PROJECT NUMBER AND NAME 9373 AN/UYQ-70 Based IT-21 C4ISR Upgrades						
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											0.000	
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			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel											0.000	
Transportation											0.000	
											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			0.000	0.000		2.521		0.000		0.000	2.521	
Remarks:												

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